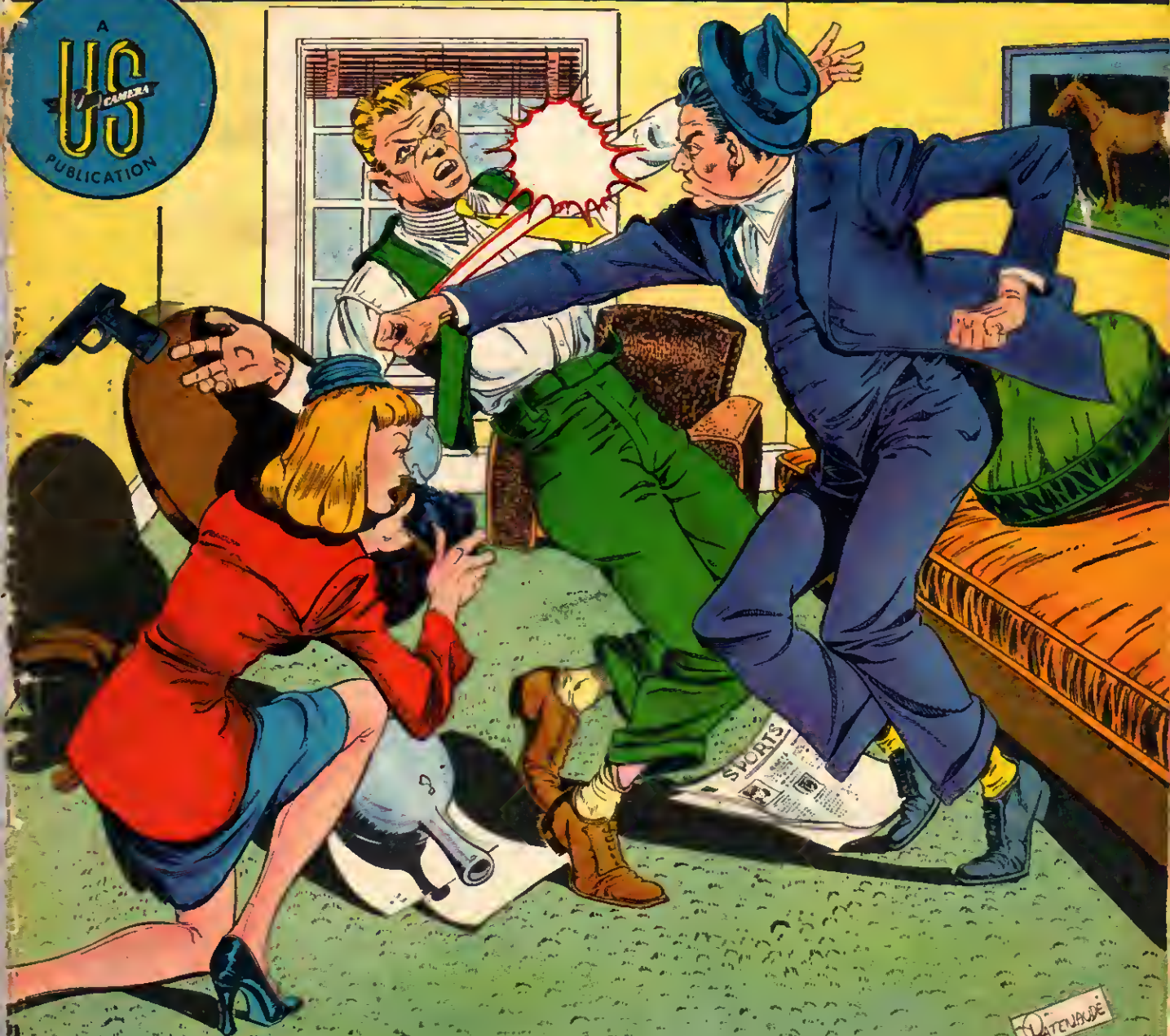


CAMERA

COMICS

10¢ NO. 8



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JIM LANE

INSURANCE INVESTIGATOR



JIM LANE, ACE INSURANCE INVESTIGATOR IS ASSIGNED TO A TASK WHICH INVOLVES HIM WITH A MATCHED PEARL NECKLACE, A BEAUTIFUL COUNTESS AND THE BUSINESS END OF A LUGER WHICH GUARANTEES AN EXCITING TIME FOR ALL HANDS!

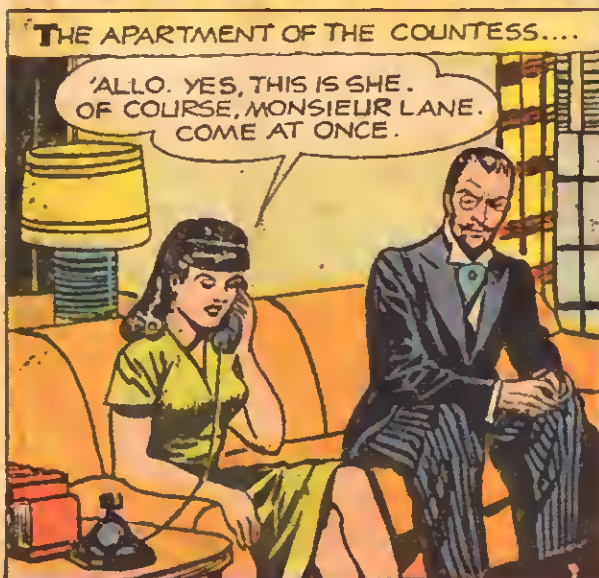
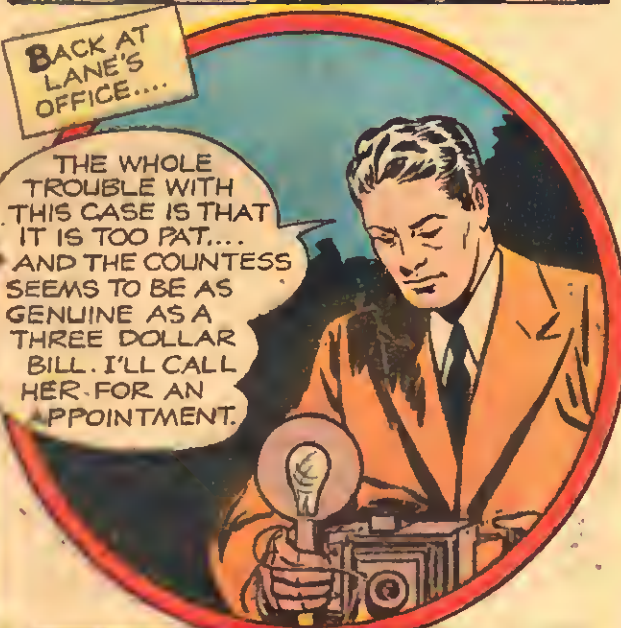
JIM LANE AND THE ACME INSURANCE COMPANY SEEM TO HAVE THEIR HANDS FULL.....

TAKE IT EASY, COUNTESS... MR. BIRNS REPRESENTS THE ACME INSURANCE COMPANY... HE OUT TO HELP YOU.

OH, MESSIEURS... EET EEZ TERRIBLE.... MY BEAUTIFUL NECKLACE GONE! GONE!

THAT'S RIGHT, MA'AM... YOU HAVE NOTHING TO WORRY ABOUT. THIS SEEMS TO BE AN OPEN AND SHUT CASE. THE NECKLACE WAS INSURED FOR ONE HUNDRED THOUS- AND DOLLARS. WE WILL PAY.







THERE / THAT'S THE LAST ONE. / THANK YOU AGAIN. / MAY I TAKE THAT PORTRAIT?

BUT OF COURSE.

YOU SEE, AL? IT WAS AS SIMPLE AS ROLLING OFF A LOG.

YEAH. BUT I DON'T LIKE HIM SNOOPING AROUND ANYWAY.

MEANWHILE JIM LANE IS DOING A BIT OF INVESTIGATING....

HMM...WHAT'S THIS? NOW I KNOW THE ANSWER...AND I'LL BE MORE CERTAIN AFTER I MAKE A LITTLE PHONE CALL.

POLICE HEAD-QUARTERS? MAY I SPEAK TO DETECTIVE SERGEANT KIEFER? HELLO, HAL... JIM LANE...CAN I SEE YOU FOR A FEW MINUTES? THANKS. SO LONG.

SLIDENLY...

LATE THAT EVENING...

NOW LET'S SEE... IT WAS THE THIRD BRICK FROM THE LEFT....

ALL RIGHT, LANE...REACH!

WELL ANOTHER MINUTE AND I'D HAVE HAD THE NECKLACE.

THEN YOU KNOW ABOUT THE SECRET DRAWER IN THE FIREPLACE? BUT HOW?

SIMPLE ENOUGH. ON THAT PORTRAIT YOU SO OBLIGINGLY GAVE ME, ONE OF THE BRICKS WAS SLIGHTLY CROOKED. ON THE PICTURES I TOOK, THE SAME BRICK WAS STRAIGHT. PRESTO! IT HIT ME, A SECRET DRAWER.

YEAH. AND WHAT ELSE DO YOU KNOW... THAT WE AIN'T WHAT WE'RE SUPPOSED TO BE?

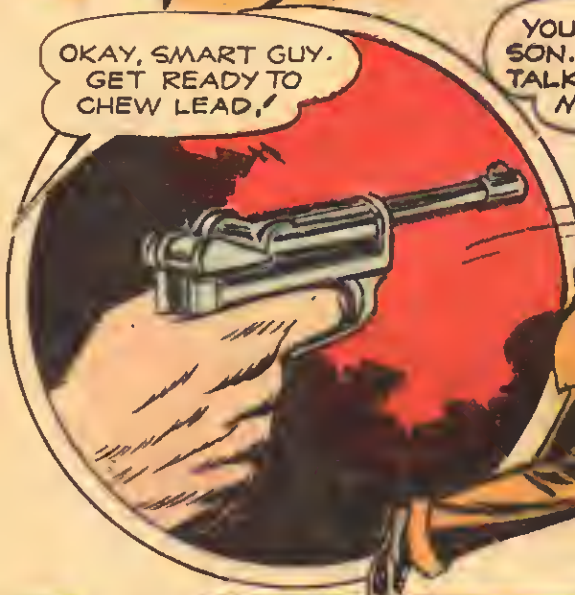
SURE. I CHECKED ON THE COUNTESS... AND YOU TOO... SUSIE AND AL JONAS... JEWEL THIEVES PAR EXCELLENCE



OKAY, SMART GUY. GET READY TO CHEW LEAD,

YOU'RE GETTING SOFT, SON... AND YOU TALK TOO MUCH.

OOF!



I THINK WE'LL GET ALONG BETTER WITHOUT THAT.

OH!!!

THE PISTOL....





MOMENTS LATER THE POLICE
ARRIVE.....

AHA... THE
DRAWER, AND
THERE IS
THE NECKLACE.



NEXT DAY...

NICE WORK, JIM.
INCIDENTALLY, THAT
NECKLACE WAS STOLEN
IN CINCINNATI LAST YEAR.
WE'VE BEEN TRYING TO
TRACE IT.

YEAH. THOSE
TWO WERE
PRETTY
CAGEY
CUSTOMERS.

BUT EVERY
GROOK GETS
TOO SMART
FOR HIS
OWN GOOD.



Richard Leach Maddox

Pioneer of Photography



IN THE ENDLESS SEARCH FOR BETTER PHOTOGRAPHIC PROCESSES, RICHARD LEACH MADDOX WAS A TIRELESS PIONEER. HIS STORY, LIKE THAT OF OTHER MEN OF SCIENCE, IS ONE OF CEASELESS EFFORT...



TODAY, WE TAKE A LOT FOR GRANTED, FOR INSTANCE...

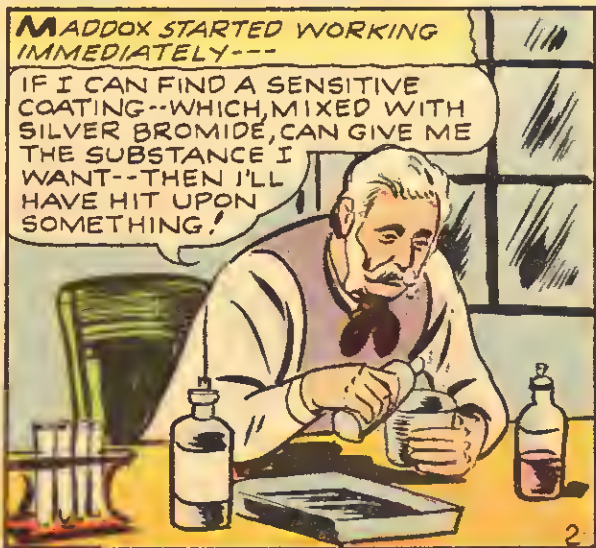
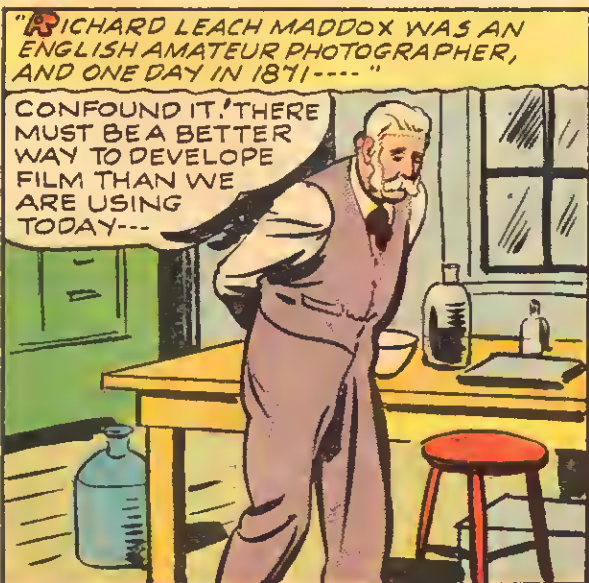
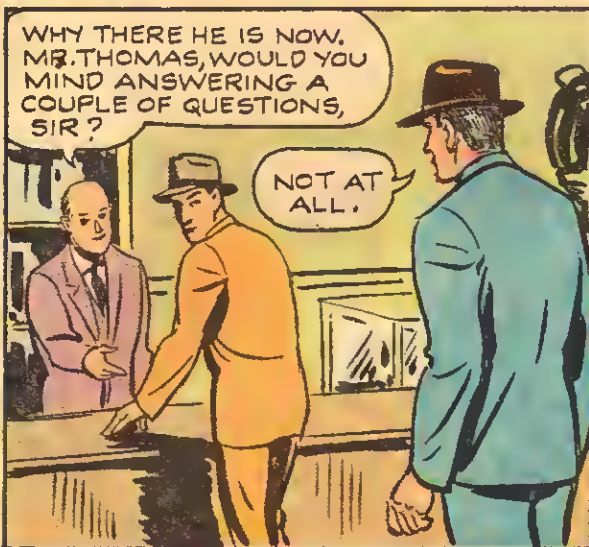
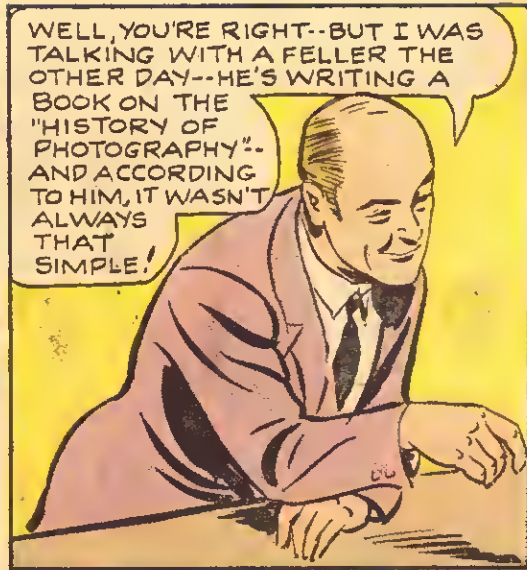
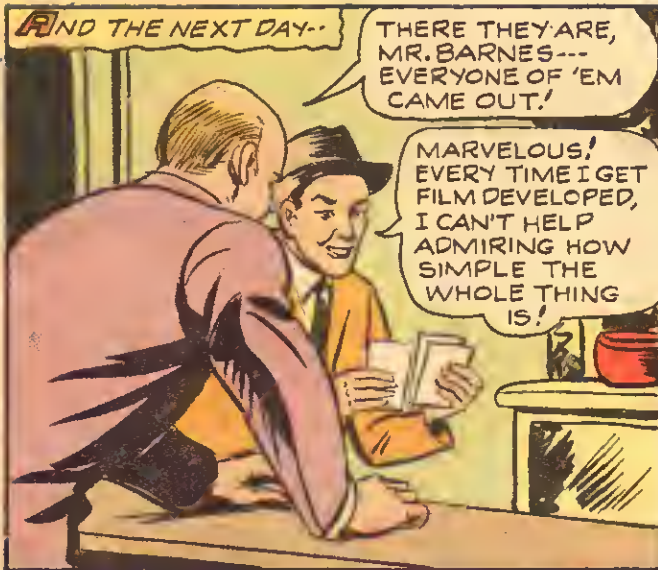
HELLO, HARRY. I HAVE SOME FILMS I'D LIKE TO HAVE DEVELOPED.

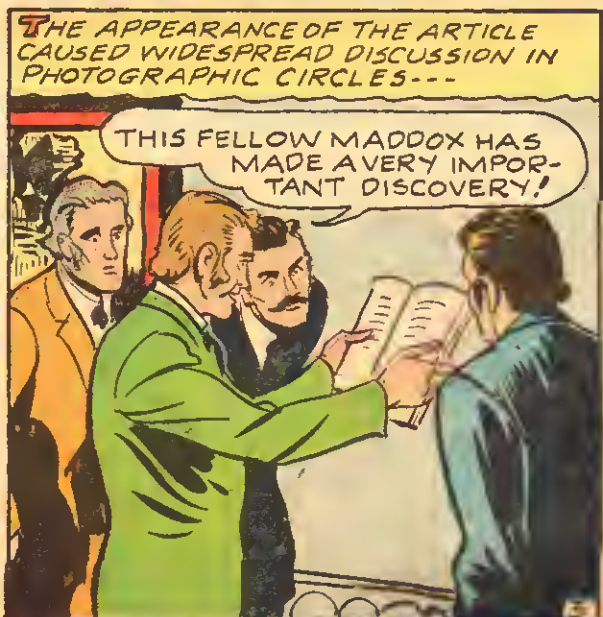
CERTAINLY, MR. BARNES!



WHEN WILL THEY BE DEVELOPED?

YOU CAN PICK THEM UP TOMORROW, MR. BARNES.

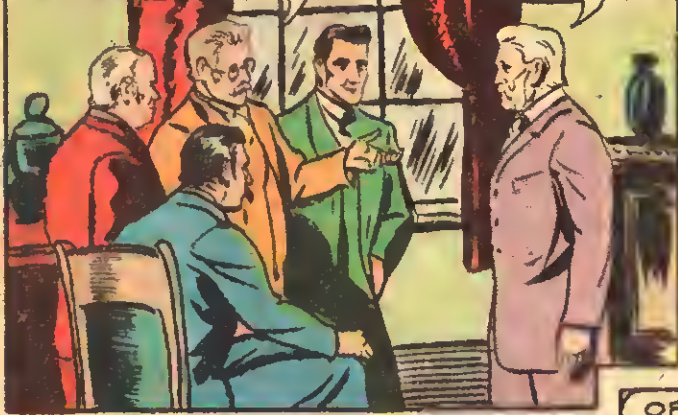




THERE WAS ONE GREAT FLAW IN MADDOX'S METHOD----

MADDOX, WE LIKE YOUR GELATIN EMULSION IDEA--BUT WE FIND A GREAT FAULT!

WHAT IS THAT, GENTLEMEN?



THE PROCESS IS VERY SLOW AND QUITE COSTLY.

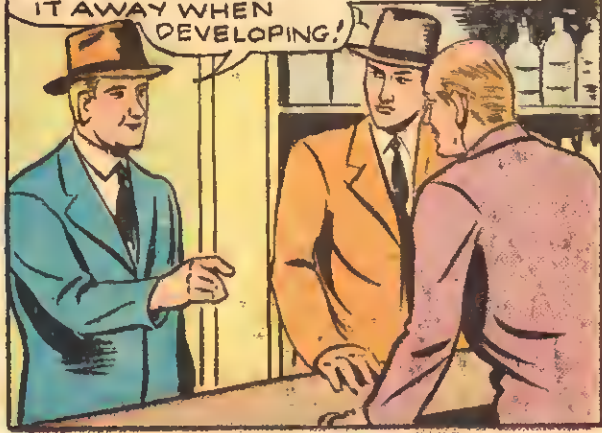


I REALIZE THAT, GENTLEMEN--AND TO TELL THE TRUTH, I DON'T KNOW HOW TO OVERCOME IT!

WELL, DON'T BE DISHEARTENED! IT IS SUITABLE FOR CONTACT PRINTING, AND IS THE BEST METHOD WE HAVE USED TO DATE!



OF COURSE--PHOTOGRAPHY HAD NOT DEVELOPED TO A SUFFICIENT POINT BY THAT TIME FOR MADDOX TO KNOW WHAT WAS WRONG WITH HIS METHOD. IT WAS SIMPLE, HE USED TOO MUCH SILVER, AND DID NOT REALIZE HE COULD WASH IT AWAY WHEN DEVELOPING!



HOW INTERESTING, MR. THOMAS---

PHOTOGRAPHY IS A FASCINATING SUBJECT, MR. BARNES!



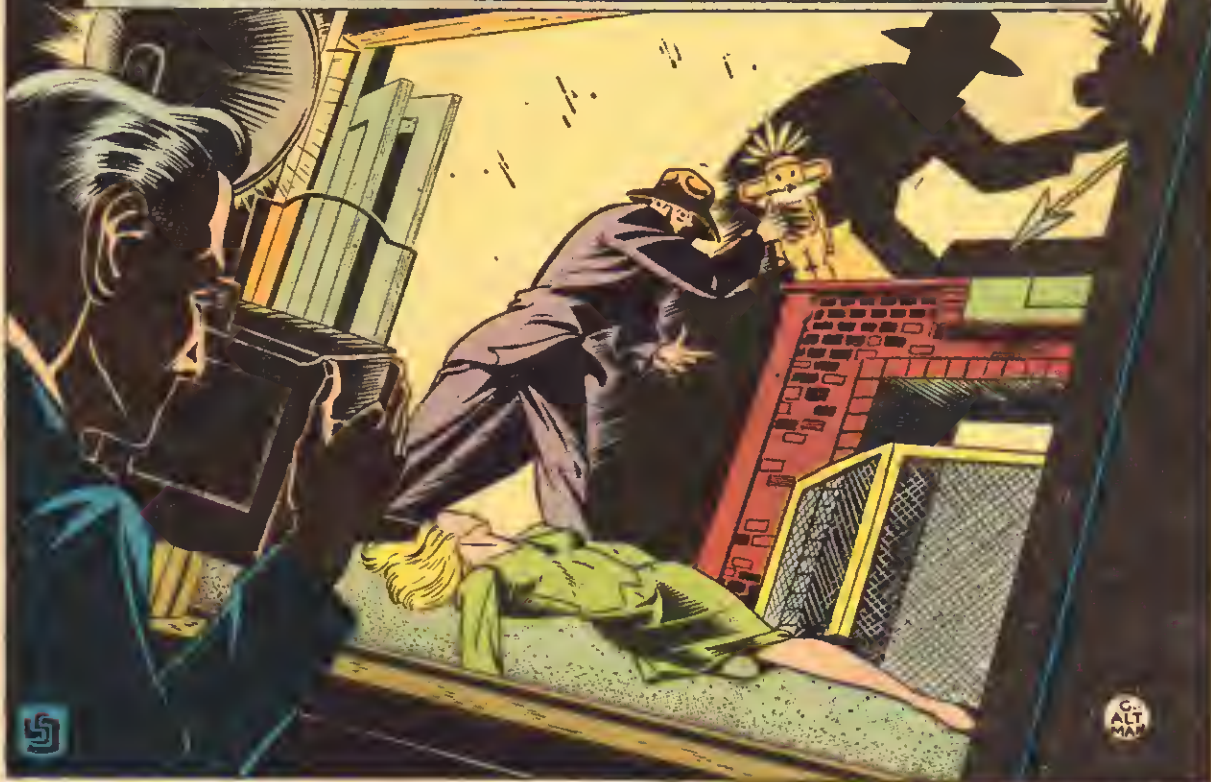
SO LONG THOMAS--AND YOU TOO, HARRY. I'LL SURELY READ YOUR BOOK ON THE HISTORY OF PHOTOGRAPHY WHEN IT IS PUBLISHED.

THANK YOU, MR. BARNES!



ART FENTON

WHEN ART FENTON, ACE OPERATIVE OF THE EPH TUTTLE DETECTIVE AGENCY, GETS ON A CASE HE HANGS ON UNTIL IT IS BROKEN.... BUT HERE, HE GETS TIED UP IN KNOTS TRYING TO LEARN THE SECRET OF "THE INCA GOD!"



IN THE HEAD OFFICE OF THE EPH TUTTLE AGENCY

WHAT'S THE PITCH, EPH?

HERE'S A CASE THAT'S RIGHT DOWN YOUR ALLEY, NOBODY KNOWS WHAT IT'S ABOUT! EVER HEAR OF DENIS PHELPS!

SURE. HE WAS AN EXPLORER--RAN AROUND IN THE JUNGLES OF SOUTH AMERICA WITH A CAMERA. SO WHAT HAS THAT TO DO WITH ME?

NOTHING. EXCEPT THAT HIS SISTER THINKS SOMEBODY IS AFTER SOMETHING THAT PHELPS BROUGHT BACK FROM PERU ON ONE OF HIS TRIPS. ALSO, THAT SHE IS IN IMMINENT DANGER OF GETTING KNOCKED OFF! NOW--HIRELING--GO!! THE ADDRESS IS 185 ARROW PLACE



OKAY MASTER. I GO! BUT I'LL BE BACK!! YES I WILL
...AND BEFORE I LEAVE-- TELL ME ONE THING!

AREN'T YOU AFRAID THAT YOU'LL
RUIN YOUR V-MAN FIGURE WITH
ALL THAT FOOD???

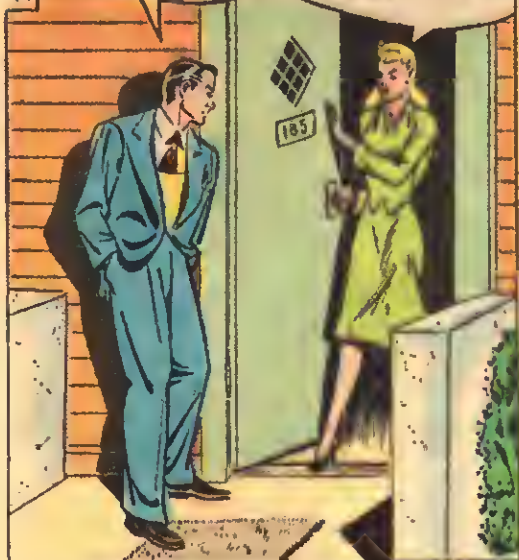
SURE!



L
A
T
E
R

I'M ART FENTON,
OF THE EPH
TUTTLE AGENCY..

HELLO, I'M
HELEN PHELPS
WOULDN'T YOU
PLEASE COME IN.



INSIDE...

THIS IS MR. WARREN
WENDELL, MY BROTHER'S FRIEND
AND ASSOCIATE. WHO WAS
WITH DENIS, WHEN HE DIED.

GLAD
TO KNOW
YOU,
WENDALL!



HMMM. THAT SOUNDS PLENTY
SERIOUS. WHAT DO YOU
THINK THIS MYSTERIOUS
ASSAILANT IS AFTER?

I DON'T KNOW.
PERHAPS YOU
WOULD LIKE A LOOK
AROUND THE DEN.

NOW WHAT'S
ALL THIS
ABOUT, MISS.
PHELPS

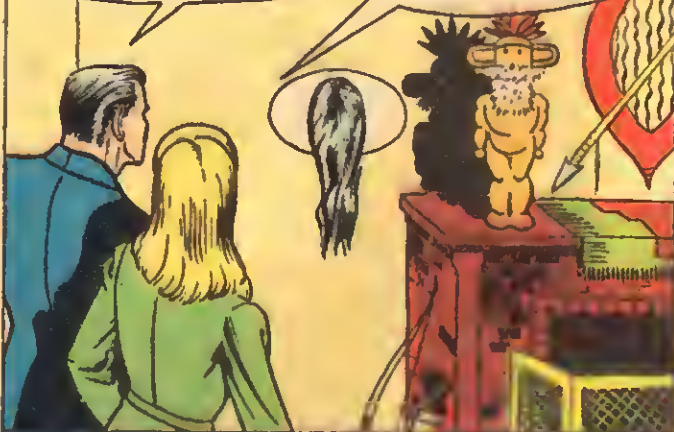
SOMEBODY IS TRYING
TO KILL ME, MR. FENTON.
AND MY BROTHER'S
DEN HAS BEEN BROKEN
INTO.



IN THE DEN...

WHAT AN INTERESTING
BIT OF STATUARY. WHAT
IS IT?

MY BROTHER
BROUGHT IT BACK
FROM PERU.



HMMM--THERE'S MORE HERE THAN
MEETS THE EYE; I'VE A HUNCH
THAT THIS IS WHAT OUR MAN
IS AFTER.



WELL....THAT'S ALL FOR NOW, MISS PHELPS.
I'LL HAVE TO THINK THIS BUSINESS OVER.

SEEMS TO ME THAT YOU ARE
MOVING IN MYSTERIOUS WAYS
YOURSELF, FENTON. THIS IS
HARDLY AN INVESTIGATION.



I THINK I'VE
SEEN WHAT I
NEED. YOU'LL
HEAR FROM ME.

OKAY.
YOU'RE THE
DETECTIVE.



THEY DON'T KNOW IT. BUT LITTLE OLD FENTON
IS COMING BACK--TONIGHT....AND WITH A
CAMERA. A PICTURE IS WORTH TEN THOUSAND
WORDS. AND I THINK THAT WHOEVER WAS
AFTER WHAT'S IN THE DEN, WILL RETURN.



THAT NIGHT....

I'LL RIG UP A CAMERA BOOBY
TRAP. AND WITH ANY LUCK,
MAYBE I'LL CATCH MY MAN

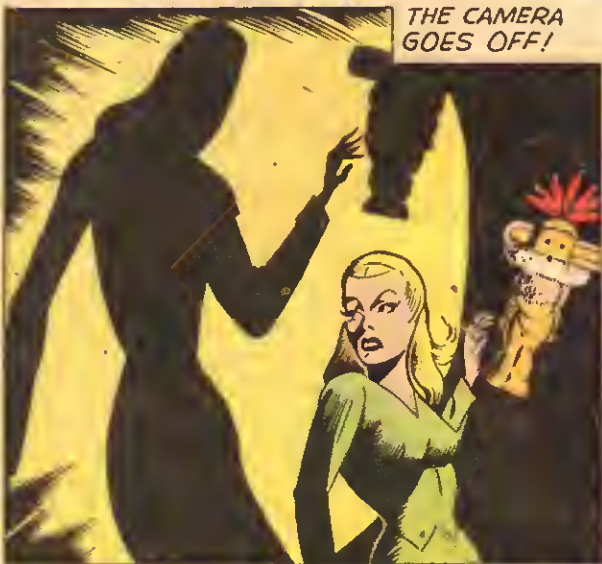




IT'S ALL
SET! NOW
FOR A
FADE OUT.



UH-OH!
SOMEBODY'S
COMING.



THE CAMERA
GOES OFF!



THIS'LL
HOLD YOU!



THE CAMERA
GOES OFF
AGAIN!



SOMETIME LATER...

OH--MY-
ACHING HEAD!
GREAT SCOTT!
THE GIRL....

HER SHOE! HE MUST HAVE TAKEN HER
DOWN THIS PATH--AND IT LEADS TO
THE BOAT DOCK.



AT THE BOAT DOCK....

CURSE THIS
BLASTED MOTOR!
IT WOULD FAIL
NOW!

HEY
YOU!
WAIT!



SLUG ME FROM
BEHIND, WILL YOU??

AND I'LL DO IT FROM
THE FRONT THIS
TIME!



OH
YEAH???



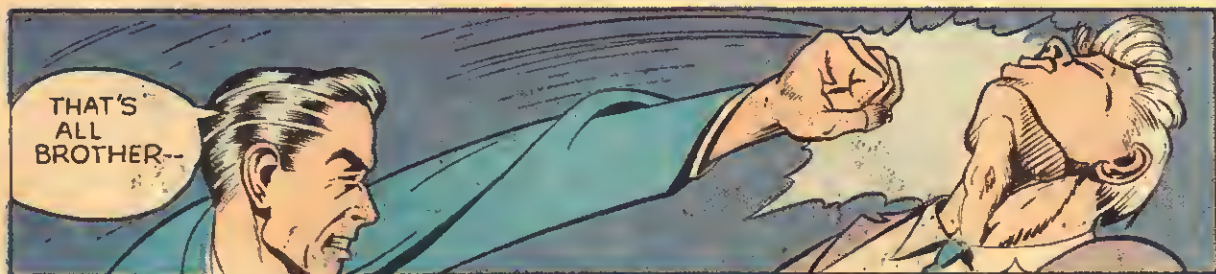
I'LL SHOW
YOU---



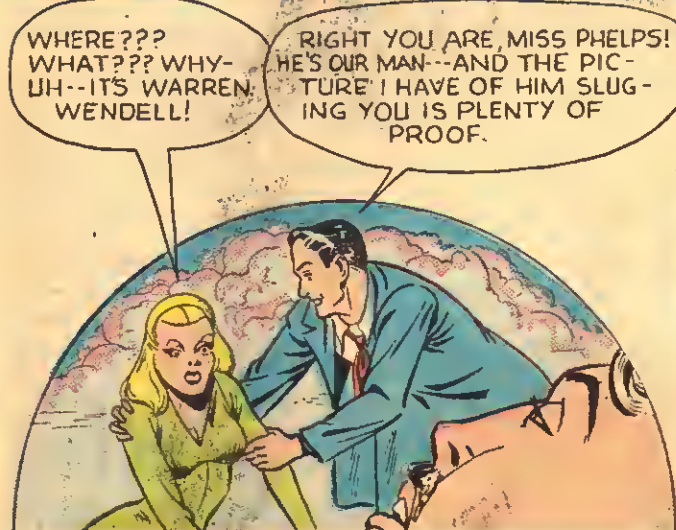
OH--SO YOU
WANT TO PLAY
ROUGH???

I'LL
KILL
YOU!





THAT'S
ALL
BROTHER--



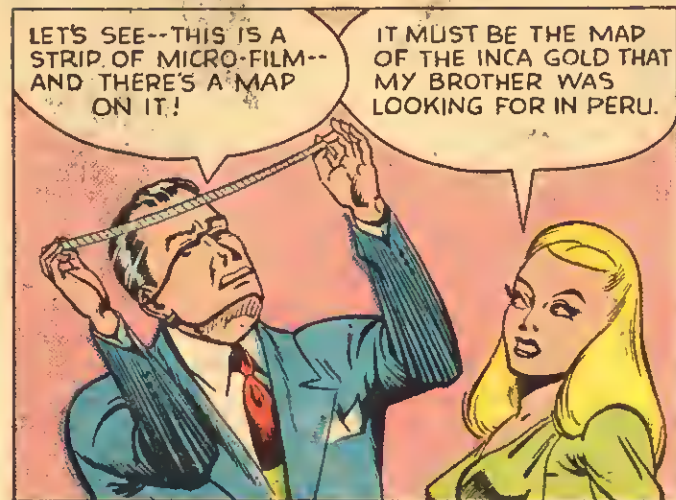
WHERE???
WHAT??? WHY--
UH--IT'S WARREN
WENDELL!

RIGHT YOU ARE, MISS PHELPS!
HE'S OUR MAN--AND THE PIC-
TURE I HAVE OF HIM SLUG-
GING YOU IS PLENTY OF
PROOF.

MUCH LATER...

WITH WENDELL IN THE
COPS' HANDS--WE CAN
CLEAR UP THE OTHER
MYSTERY--ABOUT
THE STATUETTE.

LOOK! IT
COMES
APART...AND
THERE IS
SOMETHING
IN IT.

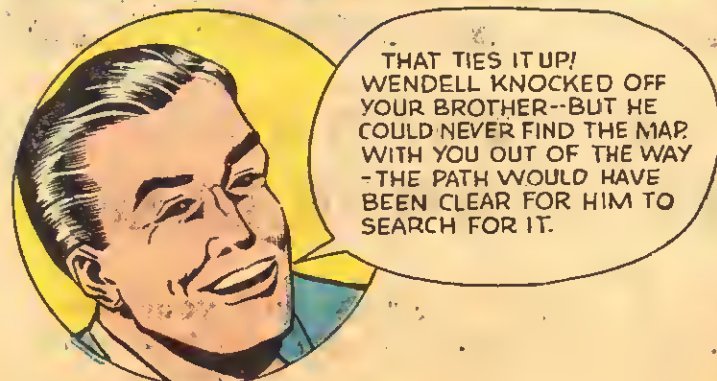


LET'S SEE--THIS IS A
STRIP OF MICRO-FILM--
AND THERE'S A MAP
ON IT!

IT MUST BE THE MAP
OF THE INCA GOLD THAT
MY BROTHER WAS
LOOKING FOR IN PERU.

HOW CAN I
EVER THANK
YOU???

THIS'LL
DO FINE!



THAT TIES IT UP!
WENDELL KNOCKED OFF
YOUR BROTHER--BUT HE
COULD NEVER FIND THE MAP.
WITH YOU OUT OF THE WAY
--THE PATH WOULD HAVE
BEEN CLEAR FOR HIM TO
SEARCH FOR IT.



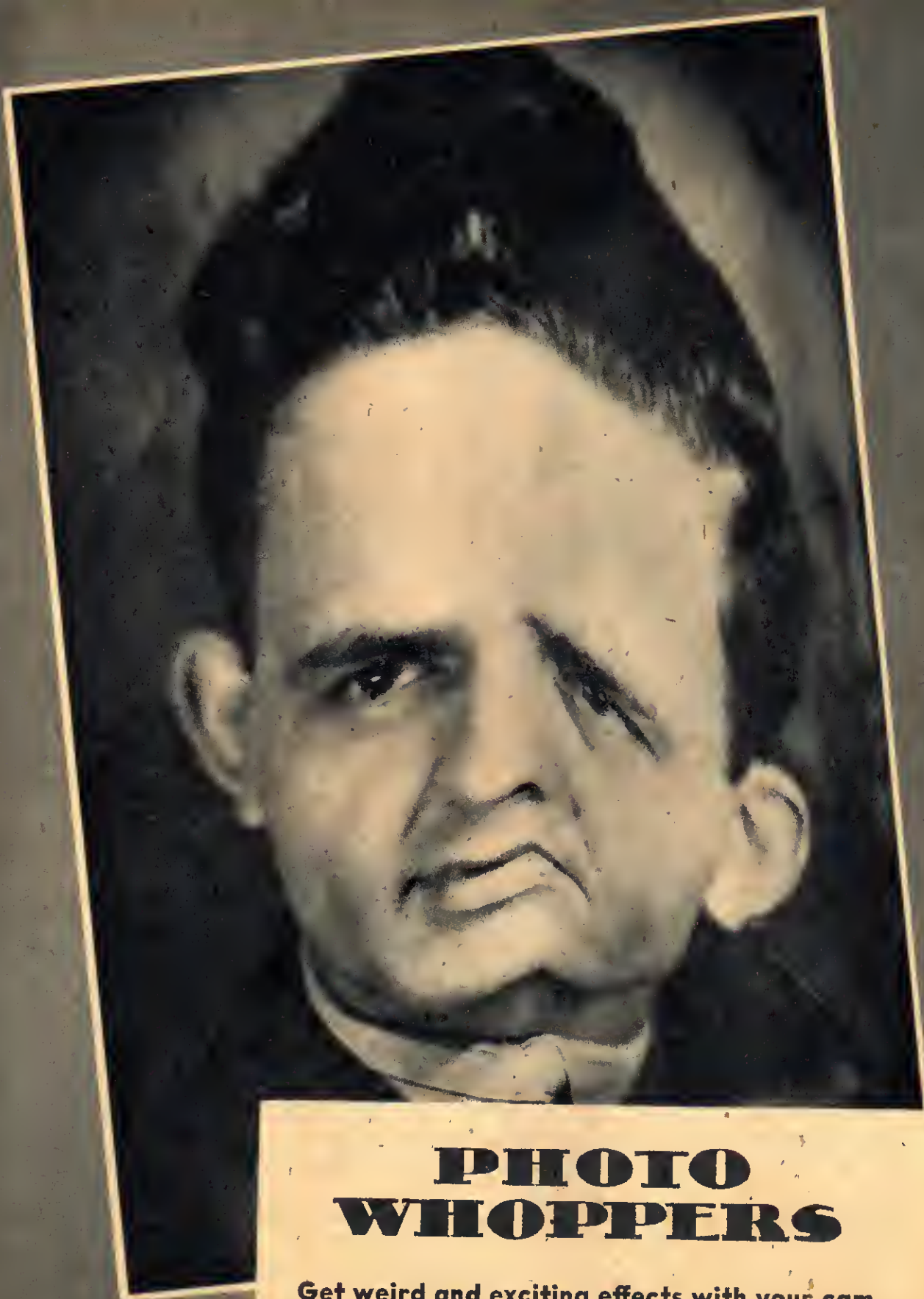


PHOTO WHOPPERS

Get weird and exciting effects with your camera. Practice the simple techniques that Paul Hadley uses to produce pictures like these. →



BABY GLOVES. Picture of baby, hand with cut-out in back, pasted on a light-colored glove, and the negative exposed. Negative of the baby was printed on the glove.



SPACE ROCKET. The "rocket" is an undressed shot of a rocket with a screen cut from print and placed in background print. **TWO NEGATIVES** were used to make this print. One of baby and one of it were. Center of film on two held to produce baby's eyes.

THE old saying that the camera doesn't lie has been disproved so often that practically no one believes it; in fact, under the skilled hands of movie and advertising photographers, the camera has been made to tell such photographic "whoppers" that people are inclined to disbelieve anything they see in a photograph.

The average camera user, with a little imagination, can produce some similarly amazing results in his pictures by use of such processes as double-exposure, pasteup, double printings or just plain tabletop photography, or combinations of two or more of these processes. Some interesting examples of what can be done are shown on these pages.

The pasteup process is one which will give the most varied results. Parts of two or more separate pictures can be cut out and pasted together on a background print to make anything that the mind can imagine. In making pasteups the pieces of the various prints are cut along the lines with sharp scissors and the edges shaved down very thin with a razor blade or by rubbing with fine sand paper. This is done so that the edges when pasted to the background will lie very flat and the raw edges of the paper will show as little as possible. After the pasteups have been assembled they are copied to make a new negative from which the final prints are made.

Copying a print means merely setting up the picture and photographing it with a camera, using a film of good contrast—such as press type or commercial. The latter are available in cut film sizes only and should be used in a camera with a ground glass back on which the image can be focused and composed before the exposure is made. The resulting negative is printed by contact or enlargement to produce the final print. The odd animal (above right) was created by the pasteup process.

Table top pictures are set up on a table, using toys, cutouts, or other objects, placed in front of a background that harmonizes with the idea of the scene.





TO CREATE THIS prehistoric creature, Hadley first made two prints of rooster's head, one in reverse. These were cut out under the eye and to the gill, joined together and pasted to print of white calf. Two portions of rooster neck make the "beard," the combs make the "ears."



ON AN ENCHANTED shore. A tabletop setup using a starfish and small horseshoe crab. Faces were painted in black and white ink. Background is photo of a beach scene.

Such pictures are best made with a camera having a long bellows extension and ground glass screen so one can see just how the setup looks before making the shot. But other types of cameras will fit the bill—even box cameras—by using a supplementary portrait attachment. Large photo prints can often serve as scene-setting backgrounds for the tiny figures. A cloud print was used as a background for the "Battle" shot (below, left).

Reflection pictures can be weird, as in the example shown on first page of this story. The twisted face is the reflection of a normal face in a squeegee tin which was bent slightly to produce distortion. Paul Hadley, who made these shots and many more, says that anyone with imagination can do as well or better.



ANOTHER COMBINATION of two prints from the negative of the rooster's head. They were cut out along a different line than those Hadley used to make odd animal shown above.



THE BATTLE. Paul Hadley recorded this primeval struggle by photographing two crab claws against a cloud background. Hadley composed the scene in the groundglass of his 5x7 view camera before he shot.



THIS TABLE-TOP photo is simple to make. A doll, a seashell, and a string of pearls were arranged and photographed in front of a painted background. Even the simplest box camera can be used for table-top photography.

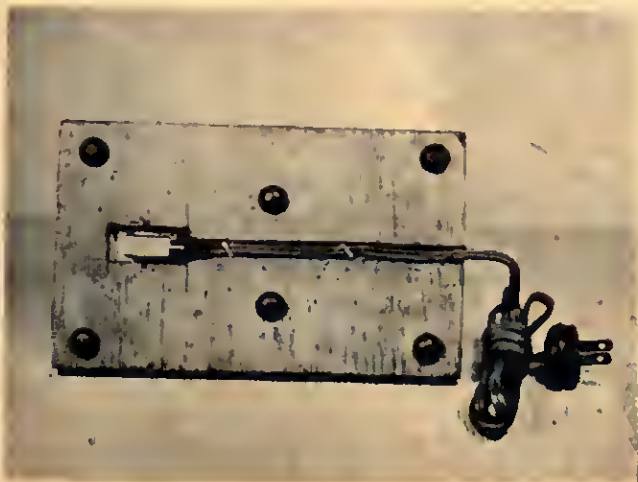
FOOT CONTROL SWITCH

**Make this simple, inexpensive setup
for your enlarger. It's fun to
work with . . . it's a cinch to build**

SINCE the new foot control switches first made their appearance in camera stores, most photographers, especially the enlarger fans, have had an eye to including one in their darkroom setup. But if you're like some people, you've been a bit hesitant about laying out the money asked on the price tags. If that's the case, then these plans to build your own foot control switch should serve you well. Like the factory



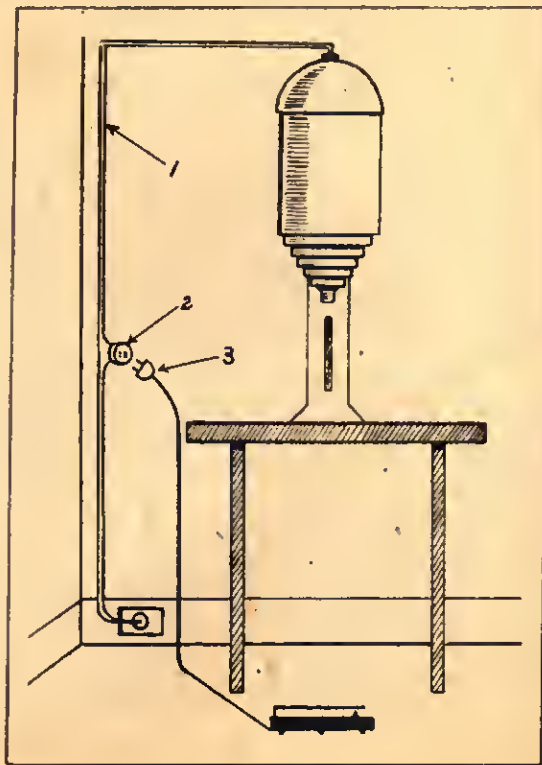
EASY-TO-BUILD foot control switch compares in operating efficiency with more expensive factory models.



BOTTOM VIEW shows the base of off-on switch (left) and cord to enlarger, held in groove with staples.

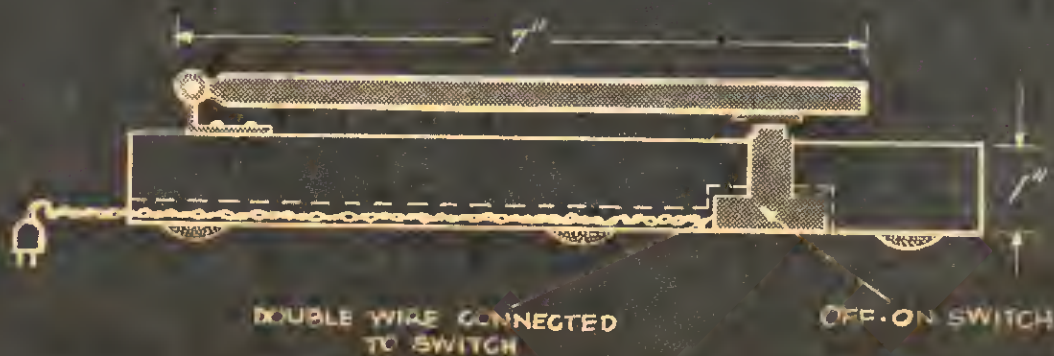
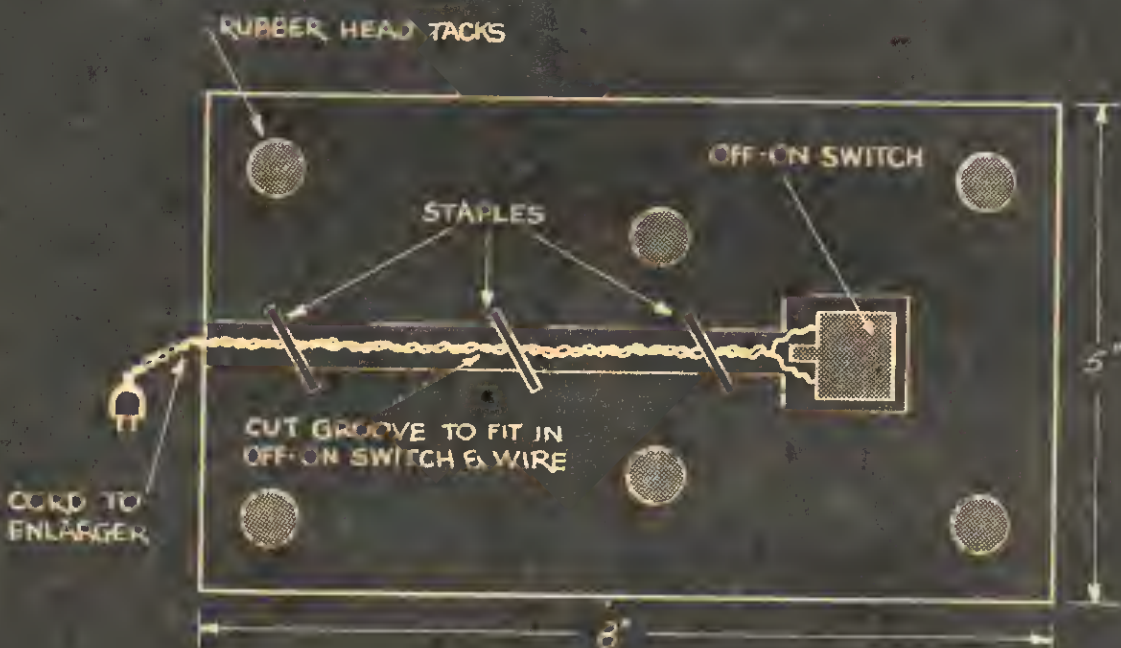
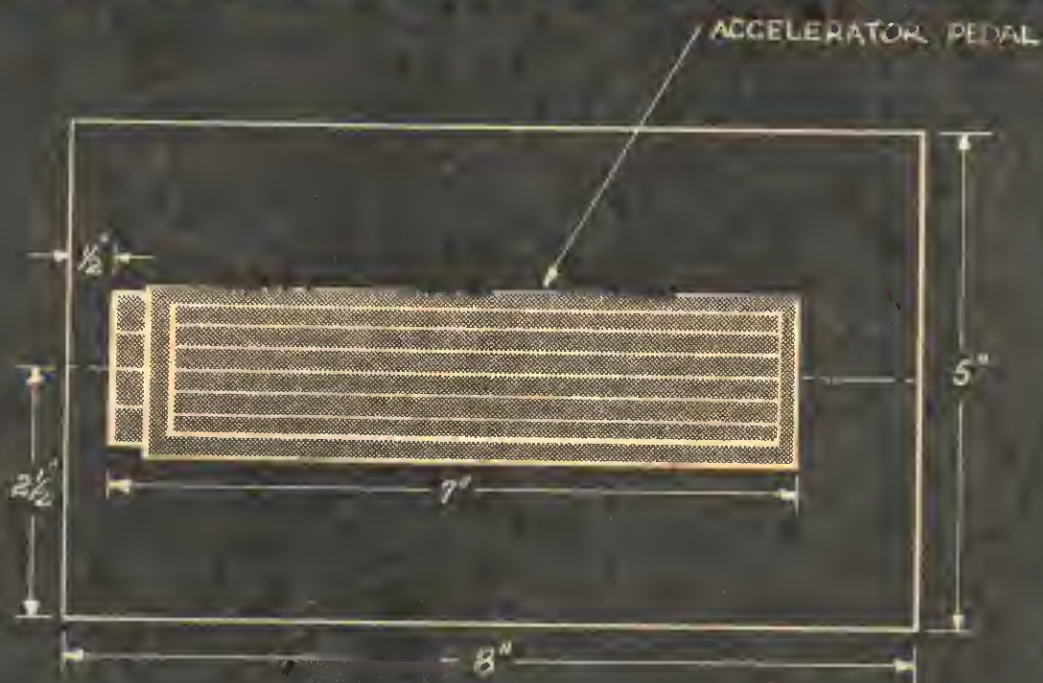
model, this switch, made by John Blécha, was designed so that the enlarger's light source can be controlled by a foot-controlled floor switch. The advantages, of course, are obvious: it allows both hands to be free at all times for paper manipulation, easel adjustments, and dodging. As the pictures and diagrams indicate, the setup is simple—easily constructed, at minimum cost; less than a dollar, in fact. So let's go ahead with the building. First, fill this bill of needed materials: a Ford accelerator pedal, off-on switch, length of wire, female plug, four rubber-headed tacks, three staples and a 5" x 8" x 1" board. Now, in what will be the base of the board, whittle a groove for the cord from the enlarger.

Next, drill a hole to receive the off-on switch. This hole should be countersunk so that the base of the off-on switch, when inserted, will be flush with bottom of board. Then to top side of board, screw, in correct position, the small foot-pedal, making sure that in aligning the pedal with the off-on switch that the rubber disk on the pedal comes in even contact with the tip of the switch (see bottom diagram on next page). Wire from the enlarger, held in groove by staples, is connected to terminals of the off-on switch. Six rubber-headed tacks will serve to support the setup.



CONSULT THIS and revealing diagrams (right) for the simple construction details.

HOW TO MAKE YOUR OFF-ON SWITCH



OLD TIME PHOTOG

**He still takes pictures like
his father did—100 years ago**

THERE'S an old photo gallery in Jacksonville, Oregon, whose doors were first opened nearly a century ago. They're still open for business and the proprietor, Mr. Emil Britt, still takes pictures by the old methods he learned from his father close to a hundred years ago. The present owner, who inherited the now famous place, simply saw no reason for breaking away from the picture-taking ways of his dad, one of the early pioneers in tintypes daguerreotypes and wet plates.

That modern photography has never caught up with Mr. Britt is evidenced in the equipment still in use in the studio. All

of it was purchased from 1849 to 1875. Some of the cameras actually date from the old mining days of middle '80s when photographs were as fuzzy as the West was wild and woolly. They were recording images before the days of the automatic shutter, so exposures were made by removing the cap from the lens and timing the exposures by a watch.

This old time studio has become, in recent years, something of a mecca for tourists. Thousands of them, especially photography fans, visit the gallery each year to see the extensive collection of photographs and to marvel at their quality—some were made on porcelain and some on paper. Studio shelves loaded with hundreds of different chemicals is an especially interesting attraction. Because they made their own emulsions and albumen paper, Mr. Britt and his



PART OF EXTENSIVE collection of old time cameras owned and still used by Mr. Britt in his Jacksonville, Ore., studios. Cameras have no automatic shutters. Exposures are made by removing lens caps and timing by watch.



SHELVES ARE STOCKED with hundreds of chemicals. Britt and his father had to be well versed in chemistry because they made their own emulsions. Story of studio is told in Universal's "Picture Pioneer."



THIS CAMERA operated by Mr. Emil Britt is no johnny-come-lately. It was first used in Northwest Territory in 1852. Britt still makes good photographs with it but pictures require about 12 sec. exposures.

father had to be well versed in chemistry. The enlargements, which were made by reflecting the original picture in a mirror, were printed on paper-coated with whites of eggs and soda.

The visitor to the gallery will find that mountain, manor and other scenic backgrounds are still handy and, of course, very much in evidence, is the inevitable head holder to keep the subject steady while the picture is taken.

It's indeed a far cry from the picture pioneers of Britt's time to the photographers of today who have every modern convenience to aid them in taking good pictures.



Camera CUES

PICTURE (left) was taken with news-type camera and synchronized flash. Ed Hannigan used Press 40 bulb above and right of camera ($1/50th$, $f/22$, pan film).

Learn how to take single and multiple flash shots and get top quality pictures under practically any lighting conditions.

EQUIPMENT for single flash photography does not have to be elaborate or expensive. For the amateur who wishes only an occasional single-flash picture, the entire equipment, outside of a camera can consist of just a battery case (holding two flashlight cells) and a reflector. The old fashioned, but ever reliable "open shutter-shoot flash-close shutter" method, can be used with good results.

As the photographer becomes more advanced he can use any one of the flash synchronizers which are available at fairly reasonable prices. The simplest synchronizer is found on the box camera with flash attachment. Box cameras with flash permit hand held exposures, but can't produce pictures of fast action. Function of all synchronizers is to release the shutter at same time the bulb is fired.

Primary requisites for satisfactory results with flash photography are accurate determination of exposure, coupled with comparatively soft development of the negative. Since exposure can be calculated by the guide number system on next two pages, flash photography presents few problems to those who are going after just straight single flash pictures.

Where to place that one flash bulb and when to

use reflectors are problems of single flash photography which make the technique interesting. The

placement of the one bulb is the all-important factor which governs not only the quality of the resulting print but also the roundness, third dimensional qualities, composition and drama of the final result. The location of the one bulb and reflector should differ with individuals, with the number of objects in the picture and with the amount of dramatic effect desired. Each type of subject matter should be considered separately.

Flash portraits supply the single principles, variations and effects of single flash photography. For best results the flash bulb should be held above and to either side of

the camera. Although most synchronizers have, the bulb on the camera, it should be removed and held over the lens, at arm's length at least. An extension cord of greater length will enable you to place the flash reflector above and to one side of the subject—as in natural ceiling light or sunlight. The flash bulb need not be held too far to one side to produce punch in single flash portraits. The flash exposure tables shown on next two pages list a number for every combination of film, shutter speed and bulb size. The photographer merely



ascertains from the chart the number for the particular film being used, the shutter speed desired and the size of the bulb being used. The guide number is divided by the distance in feet from the bulb to the subject. The resulting figure is the proper diaphragm opening or "f" stop. Note that the distance required is not the camera-to-subject, but rather the flash bulb-to-subject distance.

Determination of exposure with a single bulb must be solved for consistently good results. Flash charts are available for this use from bulb manufacturers.

Multiple flash photography—firing several flash bulbs simultaneously with the camera shutter—is a technique which brings quality lighting to action photography.

Equipment for effective results with multiple flash may be of the simplest and most inexpensive variety—an extension cord, with several outlets for standard photo-flood reflectors, plugged into your synchronizer socket will suffice. Most modern battery cases, however, are manufactured with outlets for additional reflectors. Be sure that all contact points are kept filed to reduce resistance and guarantee synchronization.



QUALITY LIGHTING with action photography is obtainable by using several flash bulbs simultaneously. In the above photo, made at 1/400th of a second at f/22, three large flash bulbs were used. Photograph by Dale Rooks is used by courtesy of the Milwaukee Journal.

If more than three bulbs are to be used, an extension permitting an extra pair of batteries will be required for your battery case. Change batteries frequently. If more portable equipment is desired, synchronizer manufacturers are marketing handy, clamp-on reflectors with fitted plugs for auxiliary lights.

FILM A

(West. Tungsten Rating 64)

AnSCO Superpan Press
AnSCO Triple "S" Ortho
AnSCO Triple "S" Pan
AnSCO Ultra Speed Pan
Defender Arrow Pan
Defender Arrow Pan Press
DuPont Superior Pan 3
Eastman Ortho X
Eastman Super-Panchro Press
Eastman Super XX
Eastman Tri-X Pan

FILM B

(West. Tungsten Rating 32)

AnSCO Isopan
AnSCO Plenachrome
AnSCO Superpan Supreme
AnSCO Super Plenachrome
AnSCO Super Plena. Press
AnSCO S.S. Pan.
Defender X.F. Pan
DuPont Superior Pan 2
Eastman Plus X
Eastman S.S. Pan
Eastman Verichrome

FILM C

(West. Tungsten Rating 16)

AnSCO F.G. Rev. Superpan
AnSCO S.S. Plenachrome
Defender F.G. Pan
Defender X.F. Ortho Press
DuPont Superior Pan 1
Eastman Ortho Press
Eastman Panatomic X
Eastman Panchro Press
Gevaert Panchromosa
Kodak Panatomic
Kodak Panatomic X

FOCAL PLANE USE

Minicameras having the focal plane type of shutter should be used with the Press 40, Press 50, No. 2 or No. 2A sizes at speeds no slower than 1/200th of a second. The No. 2A is especially recommended for use where negatives show non-uniformity of exposure with smaller size bulbs.

SUPERFLASH BULB SIZE	FILM SPEED	1/50 Sec.	1/100 Sec.	1/200 Sec.	This Column FOCAL PLANE ONLY
No. 0 or Press 25 in regular type reflector	Film A Film B Film C	#200 #140 #100	#140 #100 #65	#100 #65 —	
Press 40 or Press 25 in directed-flash reflector	Film A Film B Film C	#340 #230 #160	#230 #160 #110	#160 #110 #80	1/200 Sec. PRESS 40 #120 #80 #65
Press 50	Film A Film B Film C	#380 #270 #190	#270 #190 #130	#190 #130 #95	PRESS 50 #130 #100 #65
No. 2	Film A Film B Film C	#450 #320 #230	#320 #230 #160	#230 #160 #120	No. 2 #160 #110 #80
No. 3	Film A Film B Film C	#560* #400 #280	#400 #280 #200	#280 #200 #140	No. 2A #100 #65 #40

DIRECTIONS FOR USE

1. Check your film against list below to find A, B or C film speed.
2. Refer to table on Superflash size you use to get your Flash Number at shutter speed you use.
3. Divide the Flash Number by the distance in feet from lamp to subject to get the f stop.

Example—If you use AnSCO Superpan Supreme or Eastman Plus X with Superflash Press 40 and want to shoot at 1/100th of a second at a subject 10 feet away. Checking the film list you find these films are B films. Checking the Press 40 table at 1/100th of a second you find your Flash Number is 160. Dividing 160 by 10 (distance in feet) your lens opening is f16. Flood tables are figured the same way.

Exposure with multiple flash as with single bulb photography, can be accurately determined by using the "guide number" system. Three rules apply to exposure determining for multiple flash: (1) If one bulb is the main light source (being closest to the subject), the exposure is calculated as if it were the only light used. Refer to guide number chart. (2) If several bulbs are placed next to each other and all are directed toward the subject, divide the time of exposure for one bulb by the total number of bulbs being used, or, stop down an additional number for each two. (3) If multiple lights are placed to cover a large area and each is approximately the same distance from a section of the subject, calculate the exposure on the basis of any one section. Distance of one bulb from its section is the exposure-determining factor.

BALANCE LIGHT SOURCE

As with any other kind of light source, balance must be obtained with flash. If one balances his lightings

by having at least one bulb at or very near the camera, his lighting problems will be lessened. If the camera bulb is to be a balancing secondary light, then it, obviously, must be at a greater distance from the subject than the main light source (provided both are the same size). If the fill-in bulb (camera light) is too close, flat lighting results; if the fill-in bulb is too far from the subject, excessive contrast results. Experience will eventually teach you how to balance your lights correctly. Meanwhile, keep one bulb at the camera.

To combine flash with other kinds of light, use the "open-shutter" method. Leave shutter open long enough to expose the other light source, then flash the bulbs. Multiple flash to eliminate retouching is a second use. For duplicating normal lighting and for group lighting are other uses.

FLASH EXPOSURE TABLES

FILM SPEED { Weston G-E		4	8	16	32	64
		6	12	24	48	100
PHOTO-Lamp	MAZDA FLASH	KB	KA			
	Time, Bulb, 1/25, 1/50	70	100	140	200	280
No. 11	1/100	55	78	110	155	220
	1/200, 1/250	44	60	88	120	175
	1/400, 1/500	30	41	60	88	120
No. 16A	Time, Bulb, 1/25, 1/50	80	113	160	225	320
	1/100	62	88	125	175	250
	1/200, 1/250	50	70	100	140	200
	1/400, 1/500	35	50	70	100	140
No. 21	Time, Bulb, 1/25, 1/50	85	120	170	240	340
	1/100	65	92	130	185	260
	1/200, 1/250	55	75	110	150	220
	1/400, 1/500	38	55	75	110	150
No. 50	Time, Bulb, 1/25	135	190	270	380	540
	1/50	115	160	230	320	460
No. 31	1/200, 1/250	33	48	66	96	130
	1/400, 1/500	24	33	48	66	96
	1/1000	17	24	33	48	66

This table for SM, No. 5 and No. 6 lamps is based on the use of reflectors designed for flash with midget lamps.

No. 21	Time, Bulb, 1/25, 1/50	110	155	220	310	440
	1/100	85	120	170	240	340
	1/200, 1/250	70	100	140	200	280
	1/400, 1/500	50	70	100	140	200
No. 50	Time, Bulb, 1/25	175	250	350	500	700
	1/50	150	210	300	420	600
No. 31	1/200, 1/250	44	60	88	120	175
	1/400, 1/500	30	44	60	88	120
	1/1000	22	30	44	60	88

This table (above) for lamps No. 21, 50, 31 is based on use of studio-type reflectors designed for larger size lamps.

SM	Time, Bulb, 1/25, 1/50, 1/100	30	42	60	84	120
	1/200, 1/250	24	34	43	68	96
	1/400, 1/500	19	27	38	54	76
No. 5	Time, Bulb, 1/25, 1/50	70	100	140	200	280
	1/100	55	78	110	155	220
	1/200, 1/250	44	60	88	120	175
	1/400, 1/500	30	44	60	88	120
No. 6	1/100	33	48	66	96	130
	1/200, 1/250	24	33	48	66	96
	1/400, 1/500	17	24	33	48	66
	1/1000	12	17	24	33	48

This table for lamps No. 11, 16A, 21, 50, 31 is based on use of average reflectors with synchronizer attachments.



BARNYARD SHOTS

**TAKE A CAMERA DOWN TO THE FARM AND
SHOOT YOUR FAVORITE ANIMALS**



JUST A REMINDER that animal subjects should never face the sun. They don't like it. Keep an eye out for amusing shots like this. When you see one shoot fast. Wait for the picture you want. It will come.

If you expect to go anywhere near a farm this summer, don't make the mistake of not taking your camera with you. Here's why: On most every farm, there's a barn, and in a barn, or certainly near one, there's likely to be some of the best animal characters that ever made a honey of a picture. Just to give you an idea of what wonderful subjects cows, horses, hogs and even goats and sheep can make, take a look at these pictures. They were taken by Tet Borsig. He's a professional, of course, but he's willing to bet that anyone can take pictures as good if they follow a few simple rules. The first and most important is: "Love animals, and knowing how to best photograph them will come easy." Here are some other things to remember:



HORSES ARE PROBABLY the most handsome of barnyard animals. When they're photographed running they make an especially good picture. Note tremendous depth of field. Tet Borsig shot in 1/200th at top action.



SHOOT ANIMALS when they're eating and drinking. Milk cans tend to make interesting groups and their mothers often eat milk from their ankles and



SHEEP are always a good subject. They will accept any kind of photograph. All you need is a good camera and a good day.



ALL FARMYARD ANIMALS are placid, but all are not easy to shoot. A cow is no trouble to shoot and isn't easily alarmed. But let children get used to seeing you around before taking your shots.

1. Shoot only on sunny days. 2. Get acquainted with your subjects. Go out to the barn; walk in the fields. Study the animals before you think about taking their pictures. 3. When you have lined up your picture, don't go by. Too much fuss will scare away in an instant. 4. Fast backup and low-angle animals can be taken by shooting through a fence. 5. When taking pictures of animals, use a lens as long as you can get. 6. Take pictures from a low angle—while crouched or on the knees. 7. Have some one walk with you. It only helps show a low angle. 8. Use a tripod. 9. Never force the animal to face the sun. It may be "fearful" in you and refuse to cooperate. 10. Always have glasses. The picture you want will come to time.



THIS MEETING OF THREE "oinkers" was taken by shooting through the fence which enclose their pen. Pigs, like cows, are not camera shy. They don't scare easily and they "stay put" while being photographed.



TAKE PICTURES of animals shortly after they're born. Don't wait until the following day because in only a few hours after birth, new born, like this colt, are running around like mad.



GOATS ARE GENERALLY no better and they are good subjects. But as in all farmyard shooting, study your subjects. 11. Always be alert. 12. Look to the spot, and keep your camera.



THIS FINE PICTURE is just a sample of the many beautiful backgrounds found on a farm. Shoot fast enough to stop any movement but with as small an aperture opening as possible to insure depth of focus.

Everybody's Movie Course

A new "how-to-do" book on amateur.
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This is the book U. S. Camera fans have been clamoring for. Now published in handy pocket size, this comprehensive manual is the outgrowth of the 20 simple, practical lessons in movie-making serialized in U. S. Camera Magazine.

Here are some of the chapter headings:

- Lesson 2: Choosing a Camera
- Lesson 5: Lighting
- Lesson 6: Exposure
- Lesson 10: Editing
- Lesson 11: Titling
- Lesson 12: Color
- Lesson 16: Sound

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Address.....

City.....Zone.... State....



GRAND PRIZE WINNER in National High School Photo Contest. Picture was taken by Evan Richards, 17-year old high school student from Schenectady, N. Y.

HIGH SCHOOL CONTEST **WINNERS**

Thousands of shots were entered in the National High School Photo Awards. Here are some of the best



THIS PICTURE, taken by Clarice Davis of Schenectady, N. Y., copped \$30 prize. She was Johnny-on-the-spot to get this shot.



JUDGES AWARDED a 1st prize of \$100 to Norman H. Lehrer of N. Y. C. for this chemistry lab shot. Note the "what's gonna happen" expressions.



CLOSEUPS like this are tough to photograph. But V. Keith Simms of Roanoke, Va., managed it—a 2nd prize.



TWO YOUNG MISSES on the avenue proved prize-winning subject material for Gerald Piacentino of N. Y. C.

THIS year's competition for the \$3,000 National High School Photographic Awards was never so keen. Thousands of snapshots were received from youngsters in every state. The pictures ranged from snaps of "the kid sister" to dramatic action shots taken at Public Works projects; from a closeup view of the moon to equally dazzling closeups of the girlfriend; track and football stars outpulled classroom scenes and flash illumination proved a more popular method of taking indoor pictures than flood lamps. But the wide diversity of subject matter was not the only factor which made the job of picking winners anything but easy. The judges' job was made doubly difficult by the extremely high quality of the snapshots submitted. Only after long and careful consideration was lavished on every entry were selections finally made. The Grand Prize winner: Evan Richards, student at Nott Terrace H. S., Schenectady, N. Y. His snapshot (top of preceding page) was voted \$500 prize by Board of Judges.



WAYNE K. SAIGET of Los Angeles, Calif. entered this well-handled shot in the Recreation class. It was awarded \$50 prize.



THIS SIMPLE approach to glamour scored with judges who awarded 2nd prize to Jeanine Stiles of Los Angeles, Calif.

ONE OF THESE PRIZE pictures entered in the Sports Class. It won \$30 for Wes Cameron of Spokane, Wash.



OCCUPATIONS CLASS included such fine entries as this winner taken by Henry G. Rascoe of Harmon, N. Y.



NEW IDEAS

Here are some handy photo hints for every picture-taker



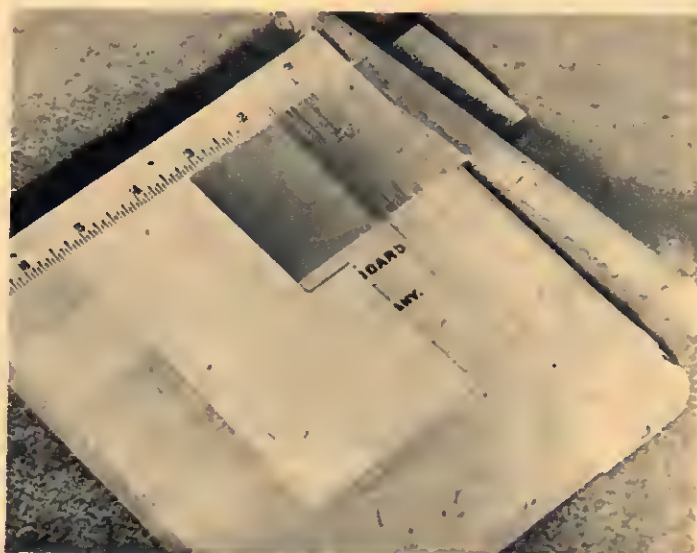
TO SOAK UP MOISTURE from prints while ferrotyping them use a double thickness of newspapers. Those who have been using blotting paper for this purpose will find that newspapers are just as satisfactory and, of course, a great deal cheaper.



WHEN WOODEN tripods fail to work smoothly, give them a thorough going over with any available variety of floor wax. They will then operate with ease.



MOVIE CAMERAS with slow speed attachments can be used to create trick effects by stop motion. Give camera a quick jab for single frame exposures.



THIS JIG WAS MADE to cut accurately 5x7 sheet film into $2\frac{1}{4} \times 3\frac{1}{4}$ sizes. First position is used to make cut resulting in strips $2\frac{1}{4}$ " wide. The second position gives a cut that trims strips to $3\frac{1}{4}$ ". Cardboard jib may be fastened in place permanently.

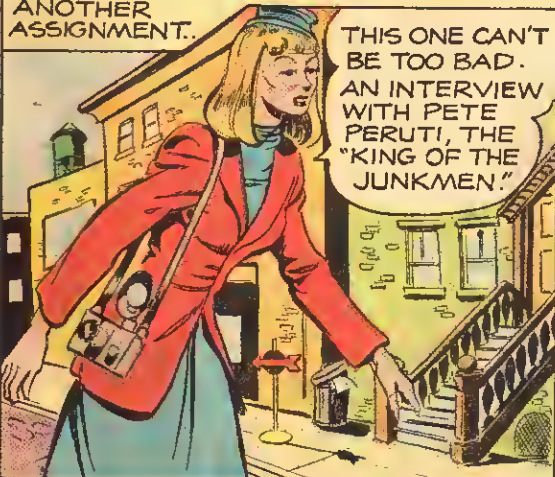
LINDA LENS

LINDA LENS IS A VERY KEEN GAL WITH A CAMERA, AND SHE DOESN'T DO SO BADLY WHEN IT COMES TO DETECTIVE WORK EITHER. AN UNSOLVED MURDER ISN'T ANY PUZZLE FOR LINDA, WHEN SHE GETS TO WORK ON IT!



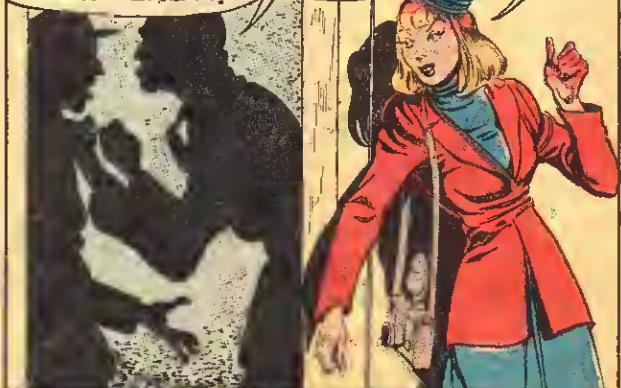
THERE GOES LINDA AGAIN... OFF ON ANOTHER ASSIGNMENT.

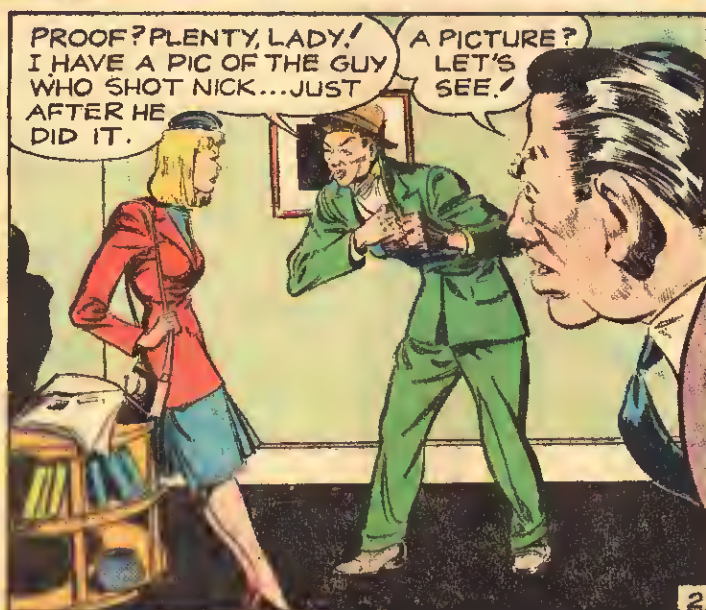
THIS ONE CAN'T BE TOO BAD. AN INTERVIEW WITH PETE PERUTI, THE "KING OF THE JUNKMEN."



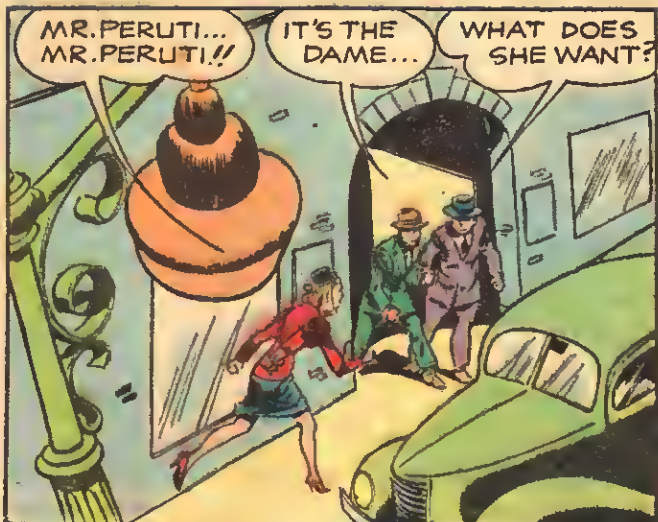
BARNEY IF YOU KNOW WHO KILLED NICK, TALK! OR I'LL BASH YOUR HEAD IN... AS SURE AS MY NAME'S PETE PERUTI!

HERE I BE.... AND IT SEEMS THAT MY BOY IS IN!

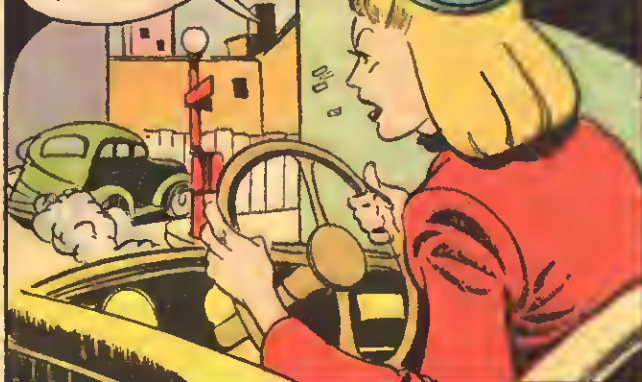




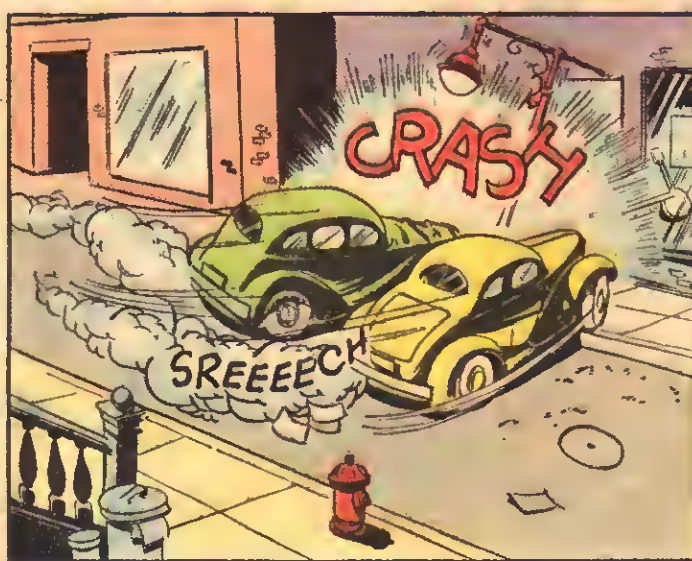




WOW! THAT GUY ISN'T
SPARING ANY GAS! OR
PAYING ANY ATTENTION
TO TRAFFIC SPEED
LAWS!

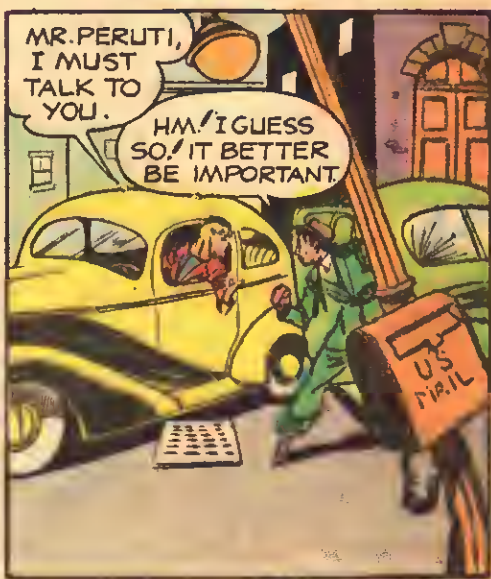


HERE GOES
NOTHING! I'LL CUT IN
FRONT OF
HIM.



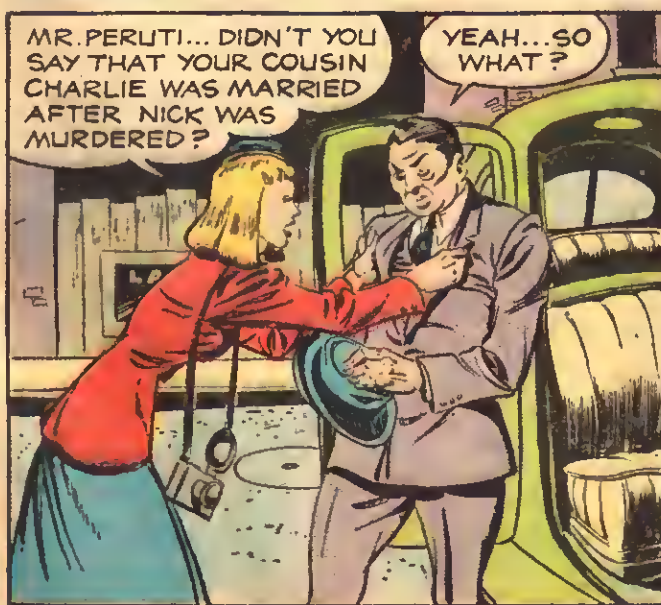
MR. PERUTI,
I MUST
TALK TO
YOU.

HM, I GUESS
SO, IT BETTER
BE IMPORTANT



MR. PERUTI... DIDN'T YOU
SAY THAT YOUR COUSIN
CHARLIE WAS MARRIED
AFTER NICK WAS
MURDERED?

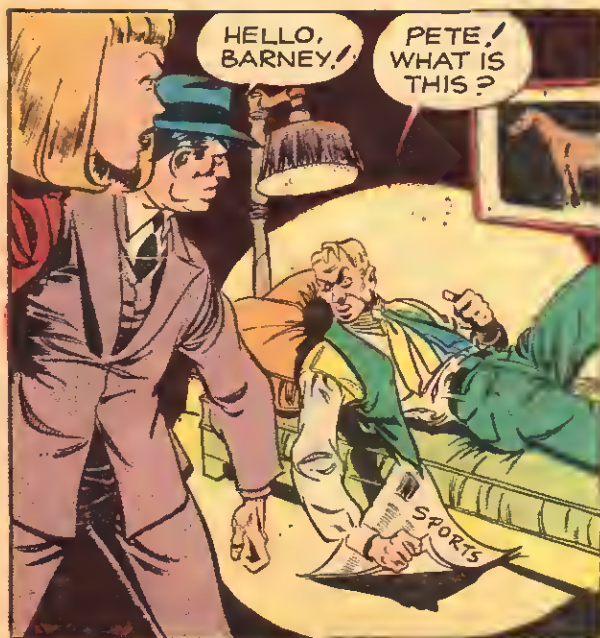
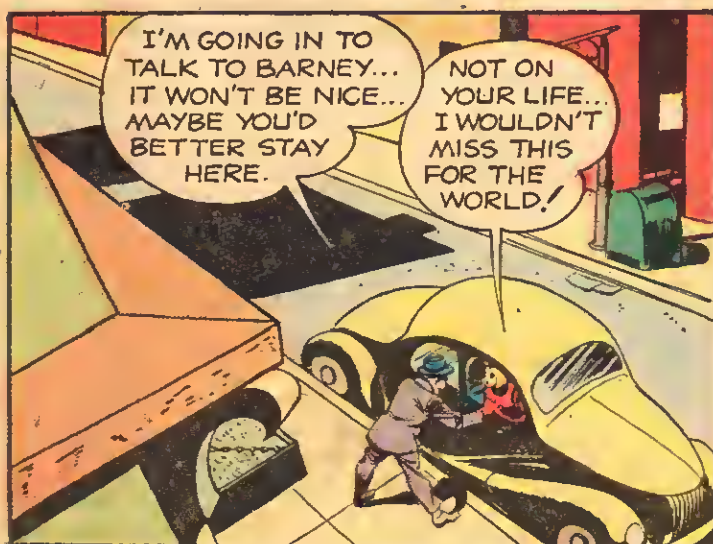
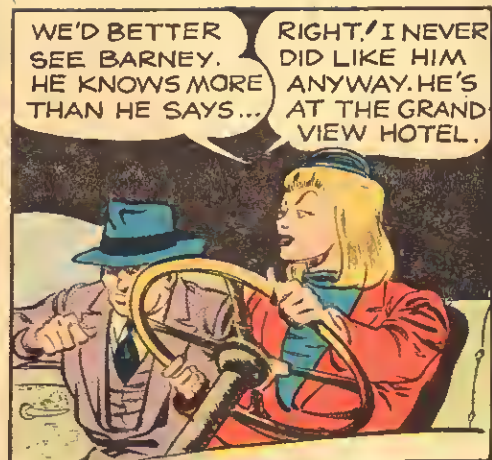
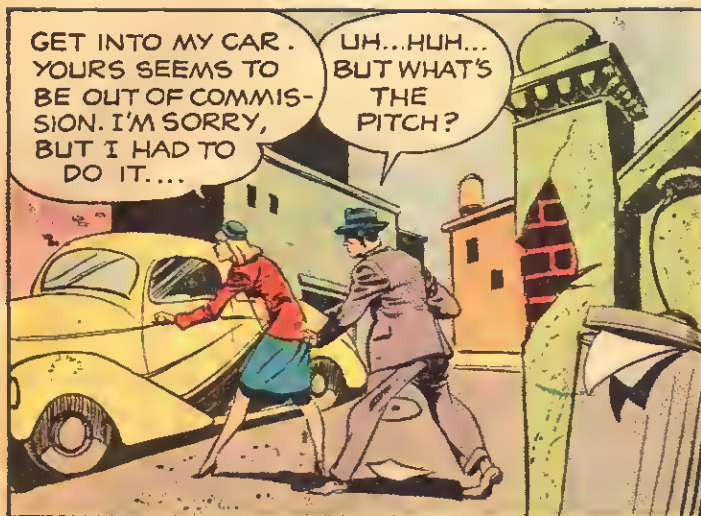
YEAH... SO
WHAT?

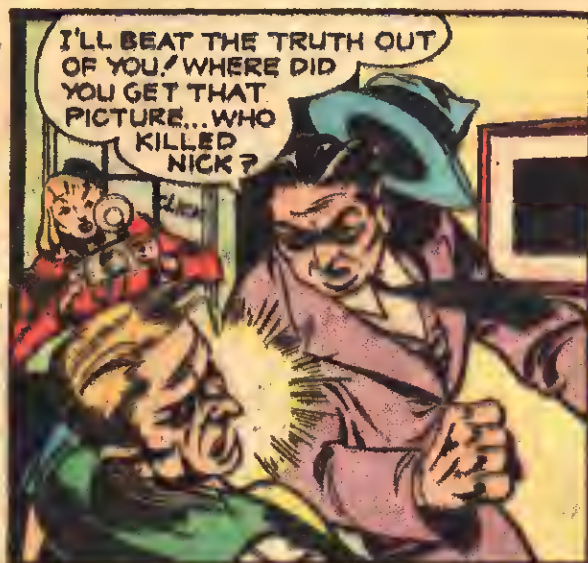
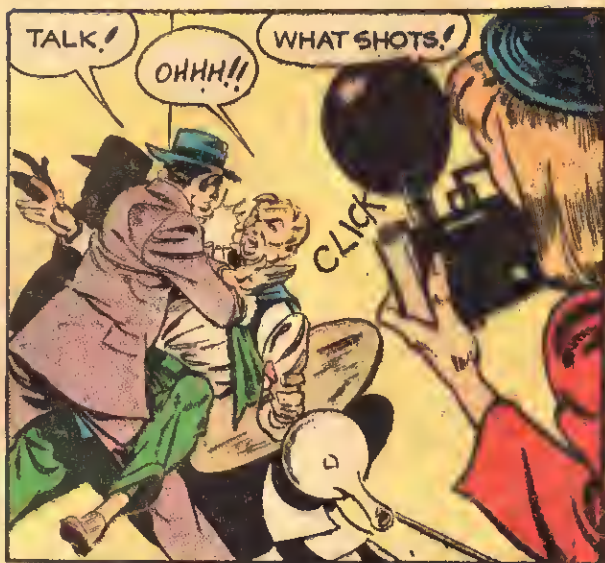


SO HOW COME
HE'S WEARING
A WEDDING RING
ON THE PICTURE,
IF HE WAS MARRIED
AFTER HE KILLED
NICK?

HUH? HEY! I
NEVER THOUGHT
OF THAT... WHAT
DO YOU THINK
IT MEANS?

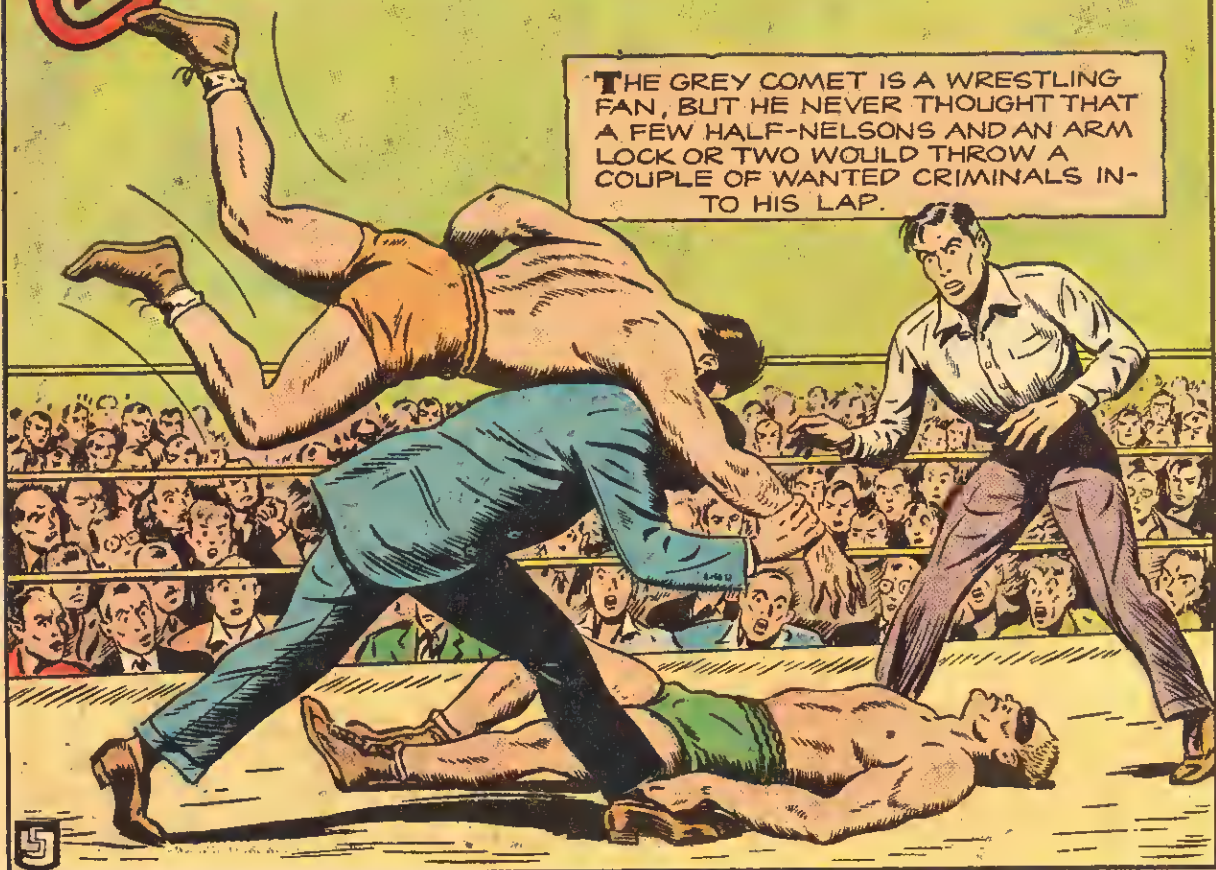






THE GREY COMET

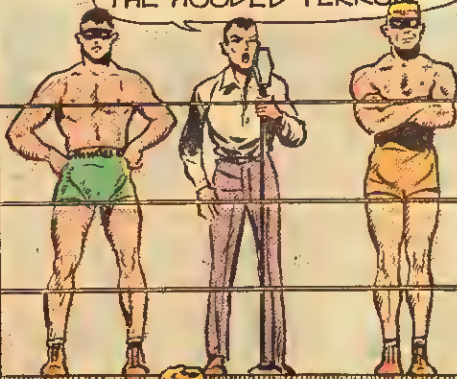
THE GREY COMET IS A WRESTLING FAN, BUT HE NEVER THOUGHT THAT A FEW HALF-NELSONS AND AN ARM LOCK OR TWO WOULD THROW A COUPLE OF WANTED CRIMINALS INTO HIS LAP.



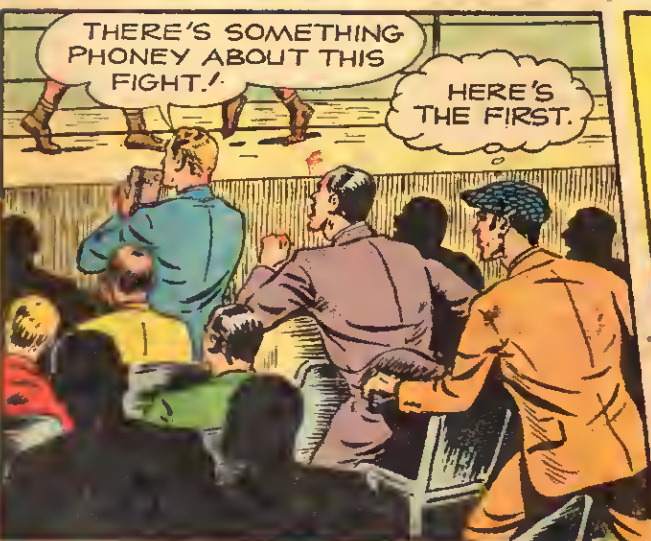
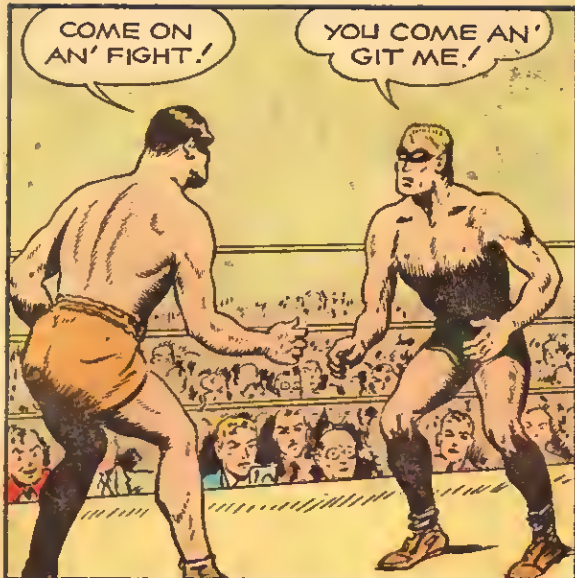
OUT FOR AN EVENING'S RELAXATION, THE GREY COMET IS AT THE WRESTLING MATCHES.....

THIS'LL BE A REAL EVENING OF FUN! I LOVE A GOOD WRESTLING MATCH! AND MAYBE I CAN GET SOME PICTURES.

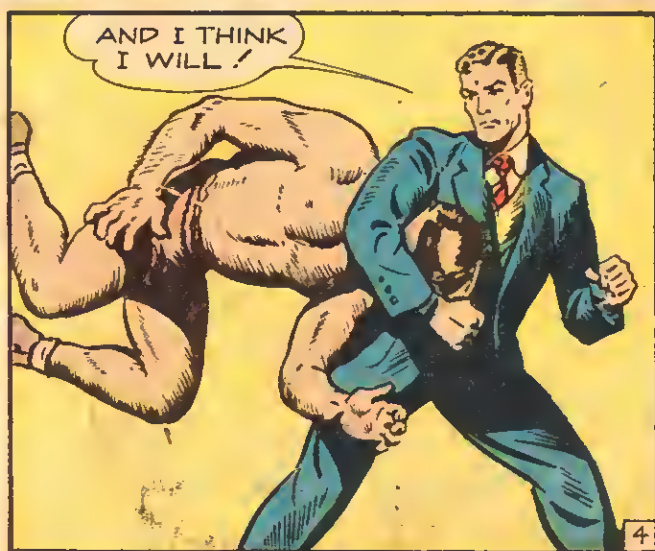
THE MAIN EVENT... BETWEEN THE MASKED MARVELS..... EL GRECO, THE GREEK... AND THE HOODED TERROR!

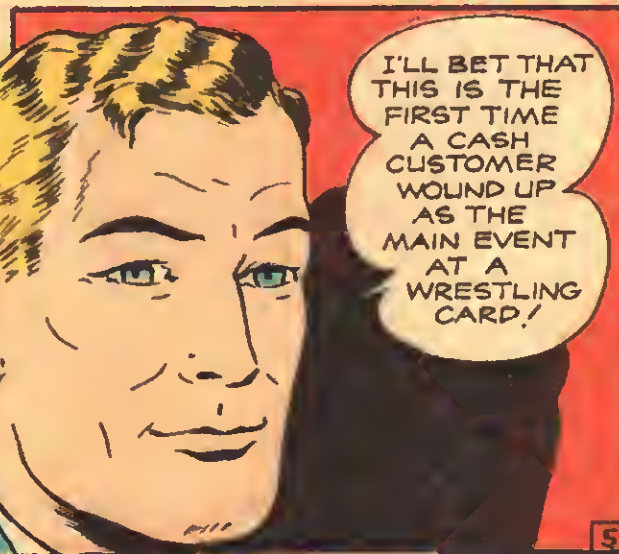
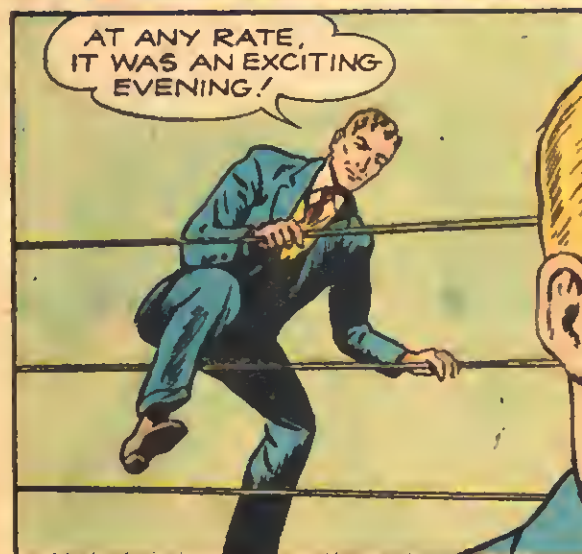
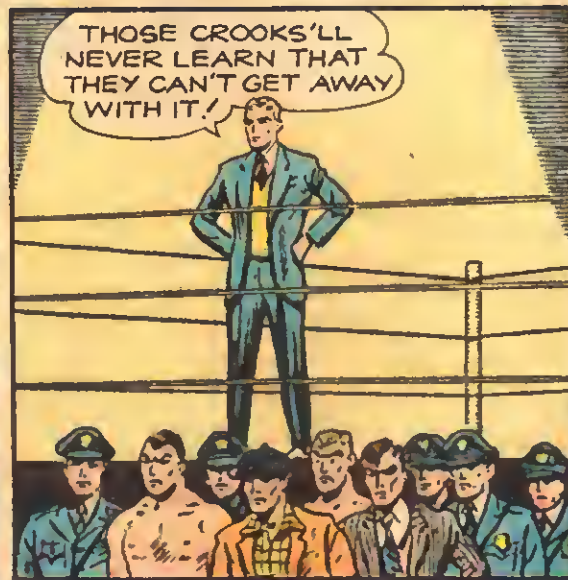
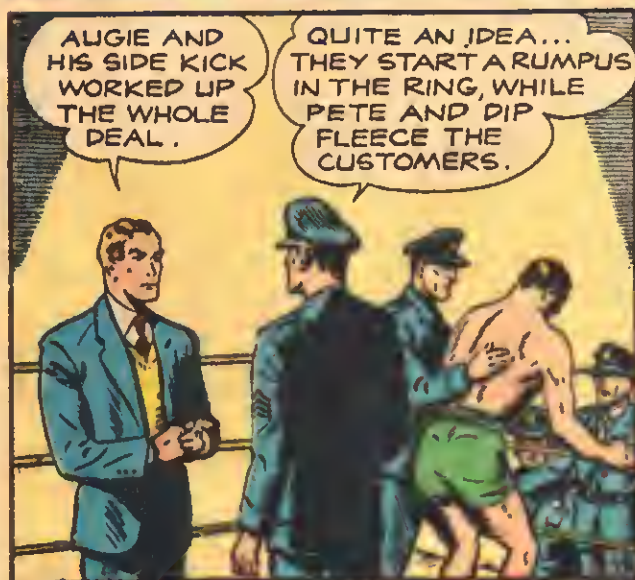
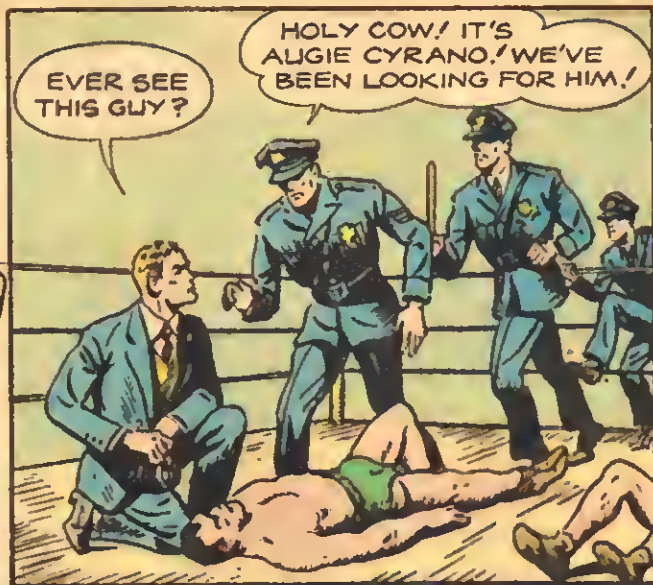
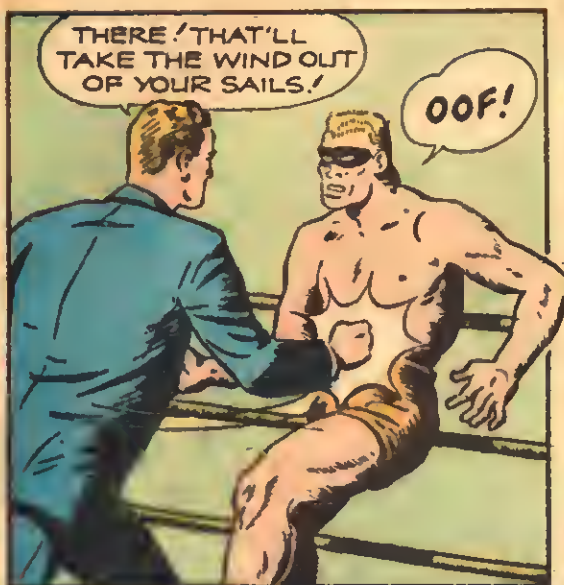


GOT 'EM!

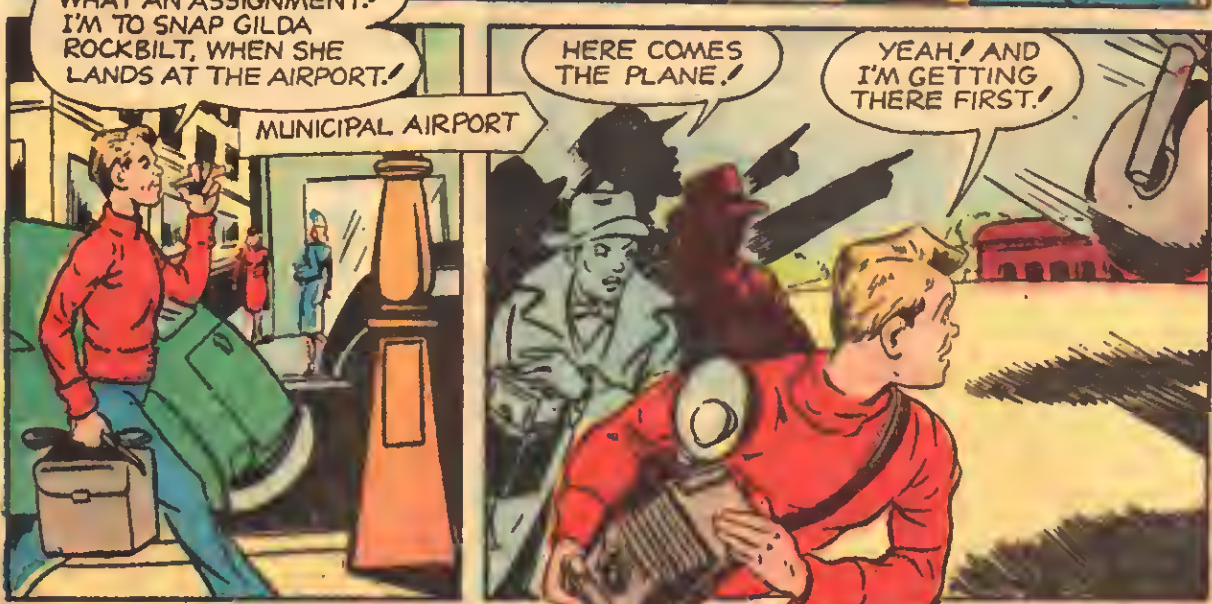


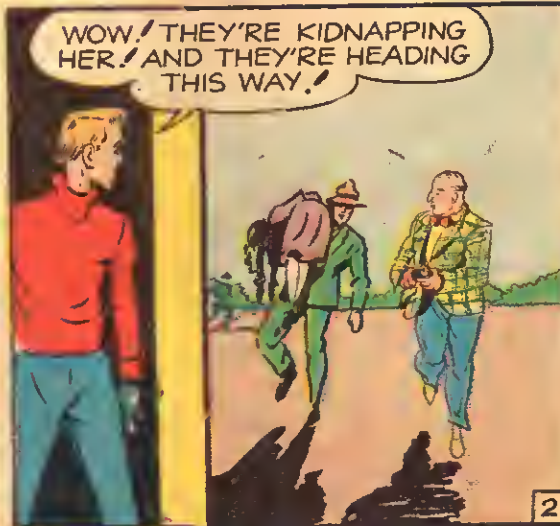
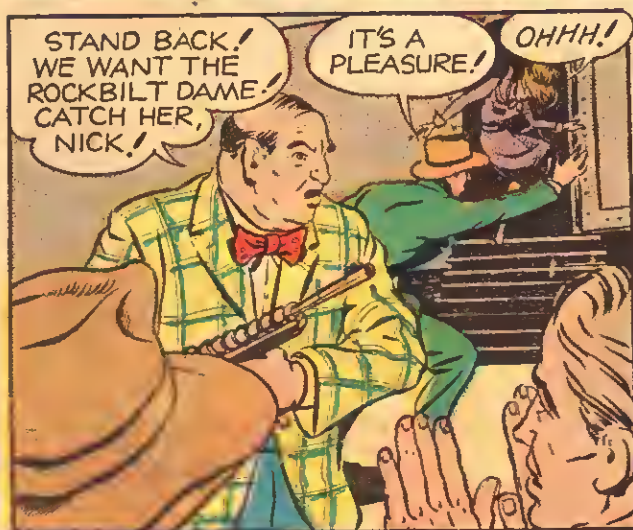
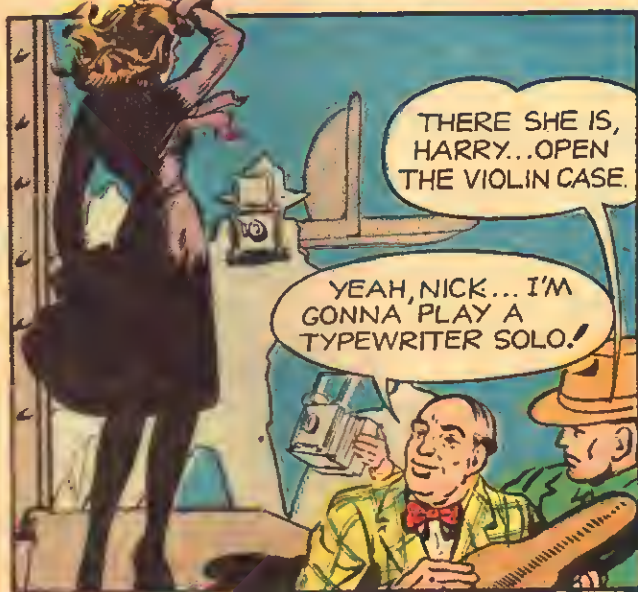
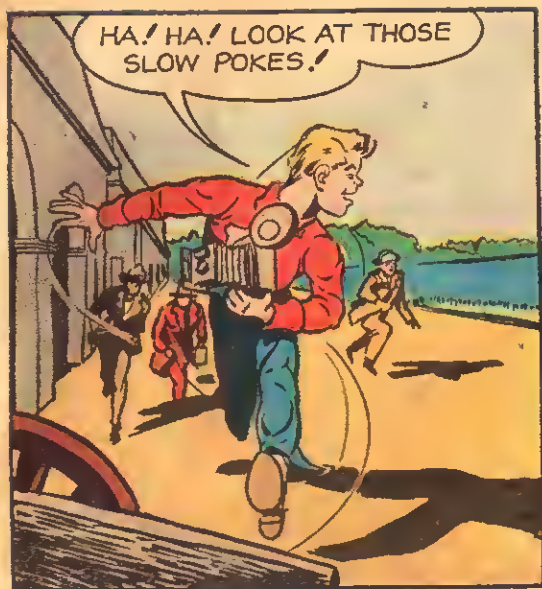






KID CLICK



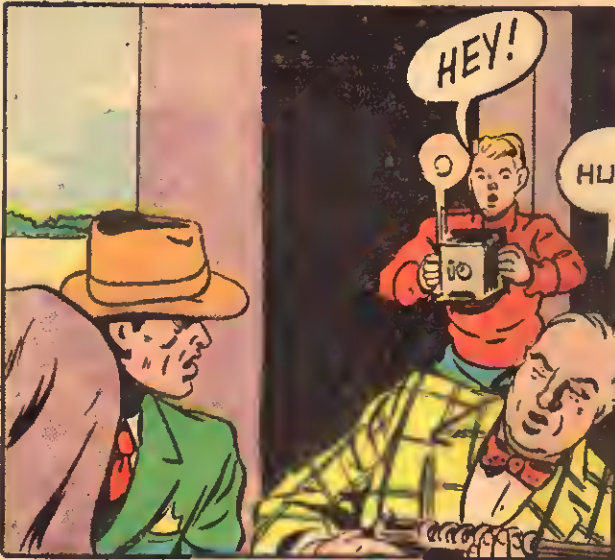




GEE, I HAVE
TO STOP
THEM...BUT
HOW ???

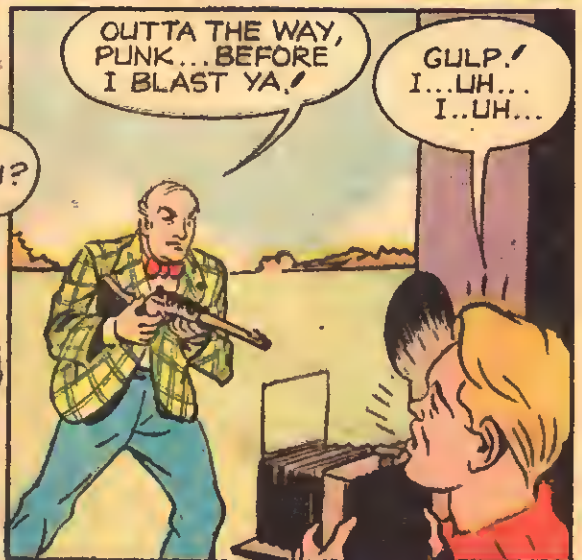


I HAVE IT!



HEY!

HUH?



OUTTA THE WAY,
PUNK...BEFORE
I BLAST YA!

GULP!
I...UH...
I...UH...

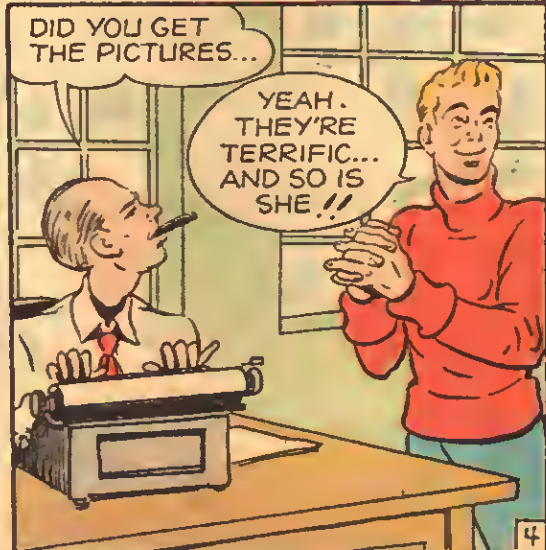
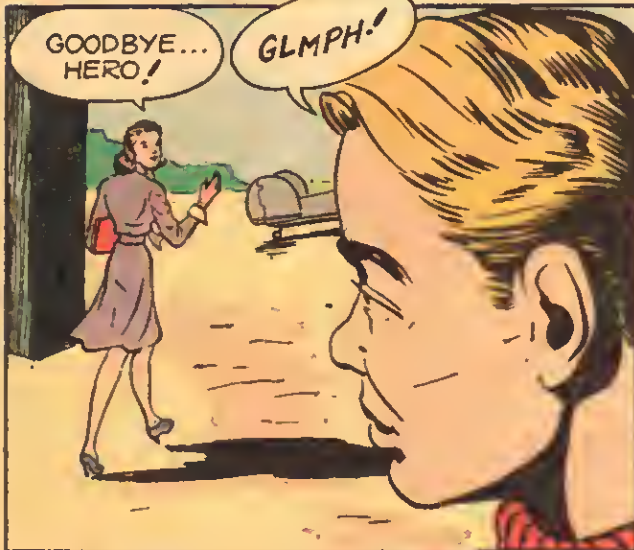
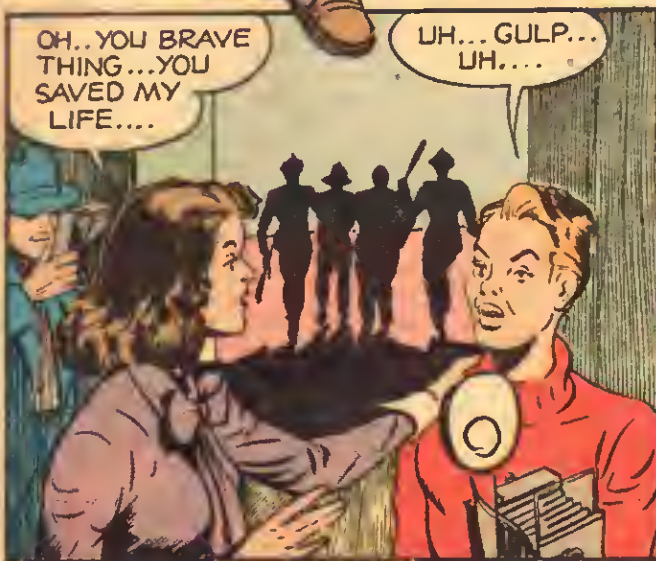
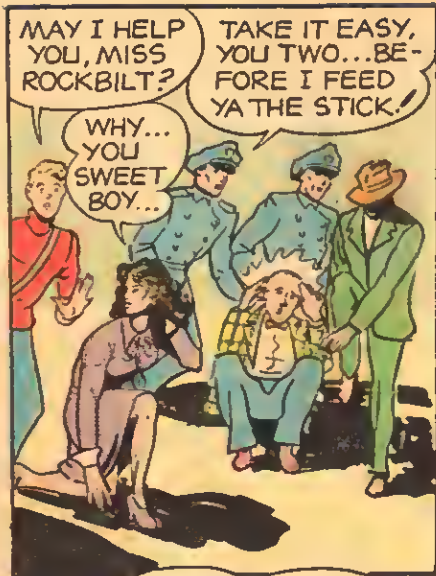
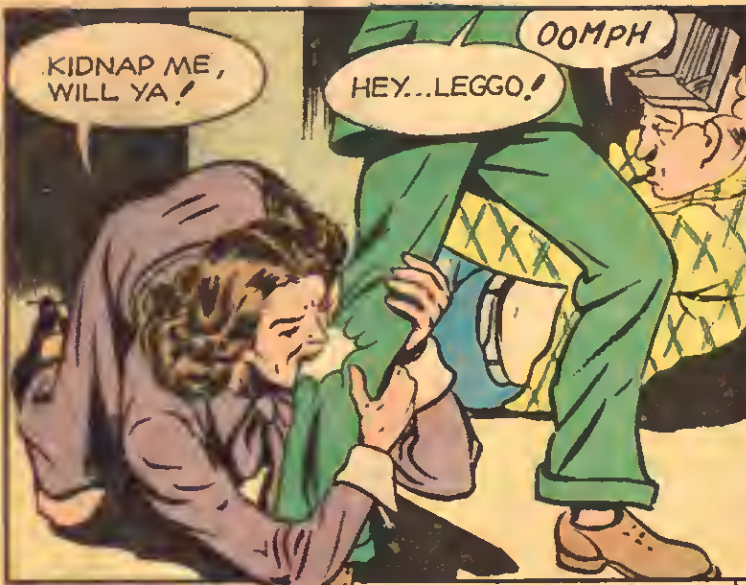


THIS WON'T DO
YOUR EYES
ANY GOOD!



YIII! I'M
BLIND!

ULP!





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